

The Mining Journal.

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1485.—Vol. XXXIV.

LONDON, SATURDAY, FEBRUARY 6, 1864.

(WITH SUPPLEMENT) (STAMPED.....SIXPENCE. UNSTAMPED.....FIVEPENCE.)

MR. JAMES CROFTS, SHAREBROKER,

No. 1, FINCH LANE, CORNHILL.
Mr. Crofts transacts business in the way of PURCHASE or SALE, in every description of stocks, but particularly in BRITISH MINES, in no case departing from the position of a broker, at net prices. All orders must be accompanied by the usual punctuality and seal, and advice given as to the nature and eligibility of INVESTMENTS, when required, EXCHANGES OF STOCK effected on the most advantageous basis, subject only to one commission.

RUNNERS TO SELL or BUY in Central Miners, Brynford Hall.
FOR SALE:—150 West Trevelyan, 3s. (calls paid); 100 Illogan, 17s. 6d. (very cheap).
BUYER of 15 Gossams; 10 Wheal Hope; 50 New Martha; 10 East Grenville; 50 Brynall, £24; 200 Bedol-Aur, 10s. 6d.; 100 Okei Tor; 20 North Downs; 100 Prosper United.
* See Important report from Bedol-Aur.

* For shares in Grylls Wheel Florence apply to Mr. Crofts.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

JAMES LANE has FOR SALE, at net prices:—5 Basset and Grylls, £17½; 20 Buller and Basset, 5s.; 50 Crebore; 50 Cornubia (fully paid), 25s.; 20 Drake Walls, 50 East Jane, 37s. 6d.; 20 East Carn Brea, £7½; 200 East Providence, £4½; 20 East Lovell; 20 East Russell, £24; 20 East Seton, 8s.; 50 Furse Hill Wood, 7s. 6d.; 50 Great Wheal Bury, £24; 20 Kelly Bray, 12s. 6d.; 60 Moland, 9d.; 20 New Wheal Martha, £13; 50 North Minera (Preference), 10s. 6d.; 11s.; 50 North Minera old shares, 6s. 6d.; 250 New Wheal Rose, 10s.; 50 New Birch Tor and Vitrill, £24; 50 North Jane, 25s.; 25 North Trekerby, £24; 30 Silver Mountain, 18s.; 30 South France, £26; 10 Treworris, £24; 40 Wheal Crofty, £24; 50 Wheal Hearle, 5s. 6d.; 5 Vigna and Clogau.

SHAREHOLDERS IN MINES AND CAPITALISTS.
I will do well to READ PETER WATSON'S "WEEKLY MINING CIRCULAR" of yesterday, Friday, Feb. 5 (No. 369, Vol. 7). Price 6d. each copy (post paid). Forwarded on application. In this Circular there are four valuable mines mentioned which are certain to pay good dividends, and the price of shares greatly advanced.
79, Old Broad-street, London, E.C.

STOCK AND SHAREDEALER.—MR. PETER WATSON,

ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD-STREET, LONDON, E.C.
TELEGRAPHIC MESSAGES TO BUY or SELL Railway, Bank, Mine, and other Shares and Stocks, punctually attended to on commission, or at net prices for cash, or for fortnightly settlements, with advice as to purchases or sales.
Nineteen years' experience.

(Two in Cornwall and Seventeen in London.)
Bankers: Union Bank of London, and the Alliance Bank of London and Liverpool.
Every information can be obtained on personal application or by letter, as to purchases and sales of mine and other shares, and the best investment for capital.
From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, PETER WATSON is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality, and to the best advantage of his clients.—February 5, 1864.

MR. W. LELAND, 11, ROYAL EXCHANGE, LONDON, E.C.

MR. LELAND has FOR SALE:—10 Barra Barra, £11s.; 25 Wheal Crebore; 20 East Lovell; 1 Providence, £45½; 5 Nanigles, £35; 5 West Chiverton, £24½; 50 East Rosewarne, £2 18s. 9d.; 25 Hington Down, £5½; 10 Great Laxey, £24½.

MR. LELAND recommends for immediate investment, paying good dividends, East Lovell, Providence, Barra Barra, and West Chiverton, all of which will bear the strictest investigation.
Shares bought and sold on the usual commission. Telegraphic messages promptly attended to. Mines inspected, and reliable information given. Established 16 years.
Bankers: Roberts, Lubbock, and Co.

MR. G. D. SANDY, SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C.

FOR SALE:—
75 Bedol-Aur, 50 East Rosewarne, £24½; 20 North Basset, £2 18s. 9d.
20 Brynall, 50 Great So. Toigus, £14½; 50 St. Day United, 36s. 6d.
3 Nanigles, £34½; 20 Hington Down, 25 Toladden, 25s.
10 Chiverton, £11½; 15 Marke Valley, 1 Buller, £7 18s. 9d.
3 Clifford Amalgamated, 5 New Rosewarne, 15 Kitty (St. Ag.), £7 18s. 9d.
2 East Basset, 150 North Minera, 10 Sithney and Carnmeal, £2 18s. 9d.
20 East Carn Brea, £7 18s. 9d.; 25 No. Trekerby, £3 18s. 9d.
20 East Grenville, £24½; 10 Prosper United, 40 Great Laxey, £25.

East Lovell.—MR. SANDY should be consulted immediately respecting this property, he being enabled to give the most reliable information.
SHARES FOR SALE in two or three mines certain to have a great rise during the present year. A correct daily price list will be forwarded on application.
Business transacted at the closest market prices.

MR. H. WADDINGTON, MINING AND SHAREBROKER,

26, THORNTON STREET, LONDON, E.C.
Shares in railways, mines, &c., bought and sold on the usual commission.

MR. E. GOMPERS, MINING OFFICES,

3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTIONS IN BRITISH AND FOREIGN STOCKS AND SHARES.
Terms, 1½ per cent.
Bankers: London and Westminster Bank.

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C.

SHARES IN MINES BOUGHT and SOLD on commission, at 1½ per cent., for immediate cash. Bankers: London and Westminster, Lothbury.

MR. WILLIAM MARLBOROUGH, 48, THREADNEEDLE STREET, LONDON, E.C.

MR. MARLBOROUGH has FOR SALE the following shares at net prices, for cash:—
20 Brynall, £11½; 15 East Russell, £5 3s. 9d.; 10 Grenville, £5 3s. 9d.
3 Nanigles, £34½; 10 Wheal Hope, £2 18s. 9d.; 20 East Grenville, £2 8s. 9d.
15 Hington Down, £5½; 10 Wheal Toigus, £2 18s. 9d.; 1 West Toigus, £61.
25 Wheal Crebore, 30s. 9d.; 1 Wheal Buller, £14½; 10 Great Bury, £4 8s. 9d.

N.B.—Wheal Crebore is rapidly improving, and should be purchased at once. I recommend their being bought up to £3 each. Reliable information as to the future prospects and results furnished on application. Intending purchasers should peruse Capt. John Nancarrow's report, made some months ago.

JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET,

AND MINING EXCHANGE, LONDON, E.C.
J. Hume's "Circular" for Jan. 13, now ready, price 6d.; subscription, 6s. per annum. Commission on buying or selling shares, 1½ per cent.
In all commission transactions, Mr. Hume returns to clients the price dealt at.
Bankers: London Joint-Stock Bank.

MR. T. ROSEWARNE, 81, OLD BROAD STREET,

LONDON, E.C., has FOR SALE:—
Bedford United, £22½; East Carn Brea, £7½; North Trekerby, £3½.
Bedford United, £22½; East Russell, £24½; North Basset, £24½.
Bedford United, £22½; East Grenville, £24½; Nanigles, £35½.
Bedford United, £22½; Great Fortune, £17; Prosper United, £17½.
Bedford United, £22½; Hington, £24½; Toladden, 27s. 6d.
Bedford United, £22½; Chiverton Moor, £24½; West Chiverton, £25.
Bedford United, £22½; East Chiverton, £24½; Wheal Buller, £14½.
Bedford United, £22½; East Basset, £24½; Lady Bertha, 16s. 6d.; Wheal Toigus, £44½.
Bedford United, £22½; East Lovell, £24½; Marke Valley, £7½; Wheal Seton, £18s.
Bedford United, £22½; North Downs, £22½; Wheal Crebore, 30s. 9d.

And is a BUYER of:—
Bedford United, £22½; Nanigles, £34½; Wheal Grenville, £5.
Bedford United, £22½; East Gannell Lake, 15s.; Wheal Edward, 35s.

T. ROSEWARNE having had the leading mines inspected by the most competent agents in the several districts, is enabled to advise capitalists in which to buy and sell.
Feb. 5, 1864. Bankers: Bank of London.

MR. J. M. SMITH, 38, THREADNEEDLE STREET,

Strongly recommends Wheal Buller, Wheal Curtis, Wheal Crofty, and Wheal Hartley among Progressive Mines; and East Pool, Wheal Seton, and West Seton among Dividend Mines.
J. M. SMITH's "Joint-Stock Companies Share Price List and Mining Circular" should be consulted by all interested in mining or commercial companies. Will be forwarded on application.

MR. GEORGE BUDGE, SHAREBROKER, No. 4, ROYAL

EXCHANGE BUILDINGS, LONDON, E.C. (Established 17 years), has FOR SALE at net prices:—15 Tincroft, £21½; 10 West Chiverton, £26½; 20 Marke Valley, £7½; 5 Great Fortune, £17; 3 East Basset, £20; 30 North Trekerby, £24½; 2 Wheal Seton, £167; 50 Trelovel, £11 17s. 6d.; 5 Nanigles, £34½; 25 North Downs, £24½; 35 Hington Down, £5½; 15 East Caradon; 150 Don Pedro North del Rey, 17s.; 20 United Mexican, £6½; 50 Charlotte United, 10s. 6d.; 35 Wheal Agar, £3½; 25 50 Okei Tor, £3; 200 Anglo Brazilian, 5s. 6d.; 2 New Seton; 60 Kelly Bray, 11s.; 50 Okei Tor, £3; 200 North Minera (Preference), 10s. 6d.; 100 Vallanazas; 3 Buller, £24½; 200 Trumpet United, 2s. 9d.; 150 West Trevelyan, 2s. 6d.; 50 East Trekerby, £24½; 25 Brynall, £27½; 100 Fort Phillip; 25 Cape Copper, £28½; 300 Great North-east, 2s.; 100 Montes Azares; 100 Sovereign (Gold), 5s. 9d.; 150 Worthing; 140 East East Seton, 8s. 9d.; 110 Garreg, 4s. 6d.; 20 East Lovell; 150 Santa Barbara, 12s. 9d.; 30 North France, 20s.; 100 Lady Bertha; 100 Sparrow, 8s.; 75 Crebore, 30s.; 50 Wheal Unity, 6s. 9d.; 200 Nanigles, 10s.

GEORGE MOORE,

1, CROWN COURT, THREADNEEDLE STREET.
In any business that GEORGE MOORE is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

JAMES HERRON has FOR SALE the following SHARES, at

the prices quoted, and FREE OF COMMISSION:—
20 Australian and Eastern 20 Harwood, £38.
20 Anglo-Mex. Mint, £18½ 20 Hington Down.
50 Aberfeldy, 12s. 9d. 20 Kelly Bray, 14s.
1 Basset & Grylls, £15 18s. 9d. 20 Lady Bertha, 17s. 9d.
5 Billins, £17½ 20 Linars.
5 Bedford United, 50 Long Hake.
1 Brynall, £25½ 50 Marquis, £47.
50 Bedol-Aur, 10s. 50 Moland, 1s.
20 Brynall, 1 Nanty, £20.
5 Buller, 20 New Treleigh, 16s. 9d.
5 Clifford Amalgamated, 30 North Pool.
5 Cook's Kitchen, £21½ 1 New Wh. Seton.
20 Canborne Vann, £2 18s. 9d. 20 New Birch Tor, £3 18s. 9d.
5 Calvadack, £6 8s. 9d. 20 North Basset, £2 17s. 6d.
1 Cargoll, £30 18s. 9d. 20 North Crofty, £24½.
50 Crenver Abraham, ½ dls. 15 North Minera, 5s. 9d.
10 Crane, 15 North Trekerby, £24½.
20 Caradon Hill, 11s. 9d. 15 North Basset, £2 17s. 6d.
5 Chiverton, £11 17s. 6d. 10 North Crofty, £24½.
1 Carn Brea, £28½ 50 North Minera, 5s. 9d.
50 East Chiverton, £24½ 10 North Rosewarne.
10 Chiverton Moor, 10 Prosper United, £24½.
20 Drake Walls, 38s. 6d. 50 North Trekerby, £24½.
50 Don Pedro, 50 New Wh. Martha (fully paid).
5 E. Carn Brea, £7 18s. 9d. 2 Nanigles, £35.
20 East Jane, 50 Nova Scotia (20s. paid), 12s. 9d.
20 East Russell, £25½ 10 Nova Scotia (20s. paid), 12s. 9d.
5 East Lovell, £24½ 10 Providence, £45½.
20 East Grenville, £24½ 10 Pentre Lyan.
1 East Basset, 5 Polbreen, £13.
15 East Grylls, 25 Port Phillip.
5 East Caradon, £27 18s. 9d. 10 Pendean, £7.
20 East Rosewarne, £2 18s. 9d. 50 Quebrada.
50 Furse Hill Wood, £17½ 50 Rosewarne Utd., 27s. 6d.
10 Glasgow Caradon, 25 Roselliff.
30 Great Retalick, 5s. 6d. 10 Rosewarne Consols (offer wanted).
10 Great South Toigus, 5 Rosewarne Hill.
50 Great Moelwyn, 3 South Basset.
1 Great Fortune, £16 8s. 9d. 1 South Caradon.
10 Gossams, £3 8s. 9d. 1 St. Just United, £2.
20 St. Just United, £2. 20 St. Just United, £2.
And is a BUYER of 10 Clifford Amalgamated, 38½; 50 Hington Down, £4½; 10 Brynall, £25½; 5 Buller; and 200 Vale of Towy.
2, Adam's-court, Old Broad-street, February 5, 1864.

MESSRS. VIVIAN AND REYNOLDS, 68, OLD BROAD STREET, LONDON, E.C.

MINING ENGINEERS, INSPECTORS OF MINES, COMMISSION, AND GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAYS, and EVERY OTHER DESCRIPTION OF STOCK.
Commission on share transactions 1½ per cent. on £100 and above, and 2½ per cent. on less sums.

MR. EDWARD COOKE, MINING SHAREBROKER,

75, OLD BROAD STREET, LONDON, E.C. Reliable information given on application, relative to the merits of mines, either for speculation or investment.

TO INVESTORS IN MINES.—MR. EDWARD COOKE begs to direct the attention of

investors in mines to his weekly article in another page of the Journal, which contains some observations on the mines in the Grylls and Chiverton district.
Feb. 5, 1864. Bankers: Alliance Bank, Lothbury.

NORTH CHIVERTON.—EDWARD COOKE is instructed to

SELL ONE THOUSAND SHARES in the above most promising mine, at £2 10s. per share net. An early application should be made, as the first applicants will secure the full number; they apply for until the 1000 are distributed. Cheques payable to the North Chiverton Company, crossed to the Alliance Bank, Lothbury, to accompany an application for the number of shares required.
75, Old Broad-street, February 5, 1864.

MR. GEORGE BATTERS strongly recommends his friends to buy

Tincroft, West Chiverton, Chiverton, Herodfoot, South Caradon, and Devon Great Consols for investment. These shares will pay good interest for money at present quotations.—75, Old Broad-street, E.C.

GEORGE SEARBY, No. 2, CROWN COURT,

THREADNEEDLE STREET, E.C.
RELIABLE INFORMATION respecting mining operations may be had by applying as above.

JOSEPH GREGORY, STOCK AND SHAREBROKER,

2, HATTON COURT, THREADNEEDLE STREET, LONDON, E.C.
Commission on purchase and sale of mining shares, 1½ per cent.
Bankers: City Bank.

MR. THOS. THOMPSON, MINING OFFICES,

12, OLD JEWRY CHAMBERS, LONDON, E.C.

WILLIAM ALLISON, STOCK, SHARE, AND MINING

BROKER, 29, AUSTIN FRIARS, LONDON, E.C.
Orders to buy or sell, accompanied by references, punctually attended to.

THOMAS HAMILTON (late of Truro), STOCK AND

SHAREBROKER, 4, AUSTIN FRIARS, OLD BROAD STREET, LONDON, E.C.
Mine shares bought and sold on the usual commission.

GEORGE RICE, SHAREBROKER, 5, COWPER'S COURT,

BIRCHIN LANE, LONDON, (21 years' experience), has SPECIAL BUSINESS, as BUYER or SELLER, for cash or account, in the following mines:—
Closing quotations.
Chiverton £11½ 3/4
East Lovell 8½ 3/4
East Caradon 27½ 3/4
East Russell 45½ 3/4
East Carn Brea 7 1/4
East Grenville 29½ 3/4
Hington Down 5 3/4
New Rosewarne 29½ 3/4
North Trekerby 3 1/4
East Lovell.—The closing prices, £28½-¼, fully prove the soundness of my late advice. Shareholders in this mine to avoid loss should learn at once the real state and prospects, and not be misled by exaggerated statements.
Money advanced on mining shares.
Feb. 5, 1864. Bankers: Bank of London.

NORTH TREKERBY COPPER MINE is an excellent

investment, and is paying regular dividends, at the rate of 12 to 15 per cent. per annum; and, as a new lode has been cut with ore of a rich quality, this mine is likely to turn out a great prize. The next dividend will be declared on the 9th of February, and anyone purchasing shares before that day will be entitled to it. Respectable brokers in the Stock and Mining Exchange deal in them; or GEORGE RICE, sharebroker, 5, Cowper's-court, Birch-lane, would be happy to execute orders. Price about £3 5s.

SHARES WANTED.—State number and lowest price. At the same

time they are strongly recommended for immediate investment and great advance.
West Caradon, £21½; Canborne Vann, £22½; East Carn Brea, £7; Brynall, £24½; South France, £23½; East Lovell, £24½; Copper Hill, £24½; South Basset, £24½; Clifford Amalg., £28½; St. Day United, £13½; Kitty (Leland), £13.
An OFFER WANTED for Tolcarne, Wheal Hearle, Crowm, and Prosper United.
H. B. RYE, Stock and Sharebroker.
Mining Offices, 77, Old Broad-street, London, February 5, 1864.

MESSRS. R. HOLEY AND CO., SWORN STOCK, SHARE, AND

MINING BROKERS, 45, CORNHILL, E.C. (late of 2, Royal Exchange-buildings), TRANSACT EVERY DESCRIPTION OF MINING BUSINESS, on commission only, and are in a position to obtain reliable information respecting all dividend and progressive mines.

MR. T. P. THOMAS will hold his NEXT SALE of MINING

SHARES, BY PUBLIC AUCTION, at Garraway's Coffee-house, Change-alley, Cornhill, London, on Thursday, the 25th day of February next, and he particularly request parties desirous of offering shares to forward him their instructions not later than Thursday, Feb. 18, that the shares may be advertised in the Mining Journal, and inserted in the catalogue.

Mr. T. P. THOMAS has also received instructions to SELL ONE THOUSAND AND FIVE (1400) PARTS or SHARES in the NORTH POOL TIN AND COPPER MINE, ILLOGAN, CORNWALL, in lots suitable for purchasers.
For further particulars, and catalogues, apply to Mr. J. W. WATSON, 13, Cornhill; Garraway's Coffee-house, Change-alley; and the Auctioneer, 2, Crown-court, Threadneedle-street, London.

FOR SALE, BY AUCTION, EAST WHEAL MARTHA MINE, LAMERTON,

IN THE COUNTY OF DEVON.

MR. T. P. THOMAS has received instructions from the Liquidators to SELL, BY PUBLIC AUCTION, at Garraway's Coffee House, Change-alley Cornhill, London, on Thursday, the 25th day of February instant, at Two o'clock, in one lot, all that VALUABLE MINE. Together with the MATERIALS, &c., known as the EAST WHEAL MARTHA COPPER MINE, situate in the northern part of Lamerton, in the parish of Lamerton, in the county of Devon.

The sett is extensive, held on lease for 21 years, from 1st August, 1861, at £5 per annum, and 1-12th royalty, the present company have paid to the lord £1500, which is to be allowed out of the property.

For further particulars, and to view, application to be made to Mr. GEORGE SEARBY or to the auctioneer, 2 Crown-court, Threadneedle-street, London.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL

MINING SHAREDEALER, 2, PINNER'S COURT, OLD BROAD STREET, LONDON; and 16, HACKINS LANE, LIVERPOOL.

Mr. THOMAS has business in the Miners Mine, at prices ranging from £255 to £265.

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE,

LONDON, E.C., has the following SHARES FOR SALE:—
20 Brynall, £2 18s. 9d. 25 East Carn Brea, £7½; 50 New Wh. Martha, 30s.
25 E. Providence, £2 8s. 9d. 25 Festing State, £14½; 20 Wh. Treawny, £18½.
50 West Trevelyan, 2s. 3d. 25 Central City, £13½; 50 Wheal Crebore, 30s. 9d.
50 North Minera, 6s. 50 St. Day United, 36s. 6d. 15 East Lovell, £24½.
50 Hington Down, £5 13s. 50 Drake Walls, 37s. 6d. 30 Wheal Hearle, 6s. 6d.
10 Marke Valley, £7 8s. 9d. 20 East Caradon, £27½; 100 Santa Barbara, 15s.
20 New Birch Tor, 56s. 3d. 35 North Basset, £22½; 1 West France, £28.
51 East Jane, 35s.
Bankers: London and County Bank.

RICHARD CLIFT, MINE SHAREDEALER,

late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed.

MR. WILLIAM WARD (late with Messrs. Dunsford and Ranken),

SHAREBROKER, 29, THREADNEEDLE STREET, LONDON, E.C.

JAMES B. BRENCHELY, 78, OLD BROAD STREET,

LONDON, E.C. PURCHASES and SALES EFFECTED in BRITISH MINES, in RAILWAY, BANK, and other SHARES, at close market prices. Cash on delivery of transfer.
For SPECIAL SALE, prices forwarded on application:—
2 Seton, 20 Great South Toigus, 25 Grenville.
Devon Great Cons., £250. 20 Agart, 20 Agart.
5 Clifford, 30 North Basset, 50 Wheal Seton, £170.
2 Providence, 2 South France, 10 East Chiverton.
3 Margaret, 4 Buller, 40 Rosewarne United, £13½.
WANTED shares in Don Mountain; state number and lowest price for cash.
Bankers: London and Westminster.

WILLIAM SEWARD, MINING BROKER, STOCK AND

SHAREDEALER, 31, THORNTON STREET, LONDON, E.C.
Commission, 1½ per cent. on all transactions.

WILLIAM BARTLETT, STOCK AND SHARE BROKER,

No. 2, BUCKLEBURY, LONDON, E.C.

The shares in the following mines are safe investments, and should be bought at once.
Clifford Amalg., £250. Nanigles, £35. 50 Wheal Seton, £170.
Devon Great Cons., £250. 20 Agart, £25. 50 Wheal Seton, £170.
East Basset, £28. Wheal Unity, £7½. West Chiverton, £25.
Providence, £45½. Great South Toigus, £5. Pendean Cons., £7.
Tincroft, £20½. Wheal Chiverton, £11½. East Carn Brea, £7½.
Wheal Grylls, £28. Brynall, £24½. Lady Bertha, 16s.
Wheal Treawny, £25½. No. Trekerby, £21. Mary Ann, £14½.
South Caradon, £440. Great Fortune, £17½. North Basset, £22½.
FOR POSITIVE SALE:—25 Crown Consols (30s. paid), 32s. 6d.; 20 ditto (15s. paid), 17s. 6d.

OFFERS WANTED for West Condurrow, Rosewarne Consols, Bantary Bay.
Any reasonable offer will be taken for 50 Aberfeldy, 50 North Pool, 100 East Rosewarne; 5 South Gossams, 5 West Penryn.

Shares bought and sold at 1½ per cent. commission.
Bankers: Alliance Bank, Lothbury, E.C.

MESSRS. WARD AND JACKMAN, STOCK AND

SHAREBROKERS, 2, ADAM'S COURT, OLD BROAD STREET, AND

MINING EXCHANGE, LONDON, E.C. (ESTABLISHED ELEVEN YEARS.)

TRANSACT BUSINESS IN BRITISH AND FOREIGN MINING SHARES AND OTHER SECURITIES at lowest prices, net or on commission, but not being DEALERS only execute orders confined to them.

Telegraphic messages to buy or sell shares of every description promptly executed for immediate cash, or the forthcoming settlements.

Messrs. WARD and JACKMAN beg to record their appreciation of the widely extended patronage they have received during the year 1863. This continued confirmation of the policy of their system of business affords them much pleasure, and they now beg to hope that, by care and attention to every order (of whatever extent) that is entrusted to them, it may still continue to deserve the confidence of their clients.

Commission, 1½ per cent. on all transactions.
Feb. 5, 1864. Bankers: London and Westminster, Lothbury.

ESTABLISHED ELEVEN YEARS.

HENRY GOULD SHARP,

STOCK AND SHAREDEALER, No. 32, POULTRY, LONDON, E.C.

Is in a position to give SOUND ADVICE and RELIABLE INFORMATION as to the BEST PAYING and SAFEST INVESTMENTS of the day.

SAFE INVESTMENTS.

NANIGLES, £34½ to £34¾.—These shares were £5 each in February last, and strongly recommended by me (many of my clients who bought them still hold); they are a first-class investment at present price, and will go to £50 this year. The mine adjoins Clifford Amalgamated, having some lodes which have paid upwards of £1,000,000 (one million) in dividends.

NORTH WHEAL BASSET, £23½ to £23¾, are perfectly safe to buy for a certain rise in price. The mine is looking well; improvements must be long taken place, and shares will double their present price. £28,000 has been paid in dividends, and shares were sold at £44 each a few years since. Prospects are good for the mine.

LADY BERTHA, 16s. to 17s. 6d.—This mine is improving, and looking better than for some time past. Shares must advance in price. "The lode in the 53 east is 1 ft. wide, worth 8s. per fm. The lode in the 53 west continues 3 ft. wide, worth 20s. per fathom. The lode in the 41 east is producing good stones of ore." "The east lodes" are very important.

EAST CHIVERTON, £43½ to £45.—The south lode in the 35 west is improving, containing stones of silver-lead. The lode in the 35 east of the north cross-course, is composed of peach and munda, promising. The north lode (which is the principal lode) they expect to cut very shortly. It must not be forgotten that this mine is better situated than any in the whole district, "Chiverton excepted," which mine it adjoins. The West Chiverton lodes pass through Chiverton into East Chiverton. Shares at £25 are a good investment. The prospects are better than when shares were £23½, a few months since.

Providence, 45-46. Wheal Treawny 21½-25
Wheal Unity 7½-7¾ Tincroft 20-20½
East Basset 67½-68½ West Chiverton 54½-55½
Great Wheal Fortune 17-17½ Clifford Amalgamated 38½-39

The following mines are also worth attention, being safe investments; a considerable advance in price will take place ere long:—

East Providence. Great

Original Correspondence.

THE NEW GEOLOGICAL SPECULATIONS.

Sir.—Your correspondent, "Carbonaceous," evidently does not know what Mr. Dickinson's paper on geology contains. He has, apparently, read only the account of it which appeared in the *Mining Journal* of Jan. 23, and which gives little more than a summary of the conclusions arrived at. The paper itself is full of "evidences in nature," and such as only a close observer, possessing frequent opportunities, could make.

From the familiarity with which "Carbonaceous" handles the names of certain gentlemen connected with the Jermyn-street Museum, it might be supposed that he belongs to that fraternity, except that those gentlemen would not be likely to write with so little knowledge of a subject, nor descend to attack the professional reputation of anyone because he happened to differ from them on a geological point.—*Feb. 2.* FAIR PLAY.

VENTILATION OF COAL MINES.

Sir,—In the *Journal* of Jan. 16 I find that "M. E." makes favourable mention of my method of removing explosive gas from coal mines. In his letter he says—"Various plans have been proposed for the safety of miners, perhaps the most sensible one being that of Mr. Williams, of Blaenavon, who proposes to drain goaves, &c., by means of iron pipes." With all due deference, I beg to say that there is no difficulty in removing explosive gas in any quantity and from any part of a goaf in a coal mine. I have done it in a coal pit in Aberdare, and can do it again. The fact is fully verified in the enclosed report, which was addressed to me by Mr. Lewis:—

"*Bullfa Colliery, Aberdare, Dec. 11, 1862.*—I have much pleasure in stating that the apparatus erected by you at my colliery for the purpose of practically experimenting and testing your invention for extracting gas from coal mines may now be seen in successful operation; and where any gentleman interested in this important matter is at full liberty to examine its operation, both above and below ground, and thereby satisfy himself as to the beneficial results to be derived by the application of Mr. Williams's very simple and effective invention.—*E. Lewis.*"

I do not require any fire pressure or machinery; one of Nature's laws put into operation will succeed. I am ready at any time to reveal the secret, and to give it gratuitously to the coal proprietors, for the sake of humanity.

I will make a few remarks on the letter of "M. E." of the above date. He says "that pipes are superfluous, as the passage and galleries can be used to advantage. I deny it; all air currents take the shortest route to the exit, and will not traverse the whole of the mine without doors, brattices, &c. Goaves cannot be entirely cleared of gas, for there are many cavities where a direct current of air cannot play on them. A current of air cannot pass through a body of gas leaving a wall of gas on each side, and on the top of the air current in the cavities of the roof. Gas floats on the surface of air as level as a sheet of water, and will not descend without pressure to an aperture below its place of exit. The action of gas and water are identical. Water sinks below the surface of the air, its surface always level. Gas in a quiescent state will float on the stratum of air, the under surface quite level. If you had a deep working water would fill the lower parts and render it unfit for work. The proprietor would spare no expense to drain it. Gas, although equally inconvenient, no one thinks of any effectual plan to remove it, on account of its invisibility. By my simple method I can either remove it to the surface or consume it in the bottom of the pit, or let it go waste. I am prepared to prove to anybody of scientific gentlemen by actual experiment its adaptability.

I should feel obliged if "M. E." or some other well-informed correspondent, would inform me by what method Mr. Biddle caused the gas to flow through the workings up the shaft? Did he dam the gas in the goaf, so that the confined evolution of the gas forced the atmospheric air through the pipes to the surface? If so, his plan is different to mine. I do not require any damming. I insert my pipe in any place where an accumulation of gas may be found, and in ten minutes it will flow to the surface, and continue to do so as long as gas is evolved in that part. I am of opinion that a large area of work may be drained into one or more large goaves, and pipes inserted into each, so as to effectually remove all danger from working with naked lights, with the exception of sudden blowers. I court the strictest investigation; and, most extraordinary as it may appear, I have asked many persons really interested in mining affairs, to investigate my plan, and find they have the greatest horror of pipes and expense, and will not trouble themselves in the matter. All who have seen my apparatus at work are fully convinced that there is no difficulty in removing gas.—*Blaenavon, Feb. 2.* JOHN G. WILLIAMS.

COLLIERY WORKINGS.

Sir,—In reply to the letter of "X. Y." in the *Journal* of Jan. 23, on the subject of sinking shafts, the last paragraph of that letter states that there is a diversity of opinion as to whether it is more advantageous to sink two new vertical shafts to the dip, or to drive an incline down in the Silkestone coal from the bottom of the present pits. These pits are sunk to this coal 160 yards deep, and the contemplated extension by an incline from the bottom of the present pits is intended to win 300 yards of coal to the dip. Two new vertical shafts to reach the same depth of coal would require to be 328 yards deep, supposing the surface to be level, and the dip 2 feet per yard. The latter plan has advantages, as to raising coal in one lift by one engine, and also for raising water, but the probable cost of each method must be well considered. The nature of the strata to be sunk through in the pits, and the quantity of water, are two important questions for consideration, and the cost of repairs with each system.

If I understand the situation aright, the present vertical shafts could not well be sunk deeper, on account of a heavy stratum of water, either lodging naturally in, or near, a seam of coal, or in old workings drowned up. If the former, the difficulty may be overcome by stopping the feeder in the pits with cast-iron tubing, which may cost 20s. per yard, and upwards, according to the weight of the metal and the size of the pits. This, of course, requires engine-power and pumps sufficient to overcome the feeder while the tubing is being put in, and the flow of water is not supposed to be of extraordinary quantity. Should the difficulty be overcome by this means, then the present shafts could be sunk (say) 174 yards deeper, and a pair of stone drifts driven in the direction of the dip of coal; these drifts would be 250 yards long to the Silkestone coal, rising 1 in 280, winning coal to the same depth as the two first-named plans. It will be observed, these drifts will encounter the same feeder of water supposed to occur in the shafts, which could also be stopped back by cast-iron tubing. Should this be accomplished the drifts might intersect other seams, the produce from which could be brought to the vertical shafts before the Silkestone coal was reached, if necessary; the value of the various seams being taken into account before deciding on any particular plan of operation. Another advantage in connection with the latter plan would be, that the machinery now erected would be available for drawing the coal and water. At present, as I understand, the two shafts are sunk 160 yards deep, and an incline is driven 60 yards in the coal to the dip, and the horizontal landing connecting it with the shafts will be worked by a separate engine, but the range of coal being limited, the quantity raised falls short of what was intended to be got from the seam; this could, perhaps, be remedied by the extension downwards of the incline (say) 60 yards further, thus giving a larger field for mining operations. B. M.

Durham, Feb. 2.

ACTIONS AGAINST COALOWNERS.

Sir,—I think it is almost impossible to estimate the injury resulting both to masters and workmen from the disreputable practices of the Miners' Union, and that it is positively necessary that there should be some legislative enactments for regulating disputes between masters and workmen, and more especially for preventing the agitators of the Macdonald and Stephenson class from exciting the men to all kinds of acts of stupidity, such as strikes and half working, in order that the delegates, or, as they are falsely called, protectors of the colliers, may live in idleness, and receive more pay than a good colliery viewer, who has had long years of practical experience. If what is wanted is contentment among the workmen and the safety of the pits, let a law be made that no man shall be appointed to any position in a colliery above a coal hewer who cannot pass an examination, nor who have not worked at least seven years in a pit. By this means we should get intelligent practical men for colliery officers, there would be a prospect for the persevering collier to get a good position, and everything would go on better.

The present action against the Edmund's Main owners can produce no good to the workmen, though the delegates may make a good thing of it. Had there been any chance of convicting the owners of neglect, all that need have been done was to send a letter to the Secretary of State requesting him to order the Inspector for the district to prosecute. As it is, the delegates have commenced 33 actions against the very firm which the Secre-

tary of State does not consider likely to be convicted. It is said, too, that prosecutions cost nothing when carried on by the Government, though the whole expenses of the 33 actions, as well as the delegates' expenses, which will amount to many thousands of pounds, will come out of the funds of the Miners' Union, and go into the pockets of the lawyers employed by the delegates. A NORTHUMBERLAND HEWER.

MANUFACTURE OF IRON AND STEEL.

Sir,—The formation of several companies having for their object the manufacture of Bessemer iron and steel causes it to be a subject of some importance to know what has been done by the company first formed, and upon the direction of which Mr. Bessemer himself occupied a place. Surely sufficient time has elapsed for some information to be given as to the realised profits; and if the result of Mr. Bessemer's company were made known it would, no doubt, materially assist the more recently formed companies—Mr. Mushet's and North Staffordshire—to obtain their capital. I presume Mr. J. G. Martien has long since sunk into oblivion; and, as it was rumoured at the time of the formation of Mr. Bessemer's company that Mr. Mushet had signed a deed to the effect that he believed Mr. Bessemer to be the first and true inventor of the pneumatic process, legal difficulties would appear to be impossible. Assuming the rumoured deed between these two gentlemen to be in existence, I should suppose Mr. Mushet bargained for the right to make use of the pneumatic process without payment of royalty to Mr. Bessemer. If this be so there is nothing to prevent Mr. Mushet's company being a decided success. Mr. Mushet's inventions of improvements are very numerous, and the inventor being an experienced practical man their utility cannot be doubted. I scarcely think that the prospectus is explicit enough with respect to the purchase-money, for upon reading it with ordinary attention one would consider, as you have made it appear in your City Article, that the purchase-money is 260,000*l.*, though I am inclined to think that the fact is that it is only 100,000*l.*, for the prospectus states that of the 2000 shares of 100*l.* each only 400 will be created, whence it must be concluded that the remaining 1600 shares, of 100*l.* each, remain the property of the company. This leaves only 100,000*l.* as the purchase-money, and I do not hesitate to say that the payment of that amount for Mr. Mushet's patents is just and reasonable, and will afford the company ample opportunity for realising enormous profits. M. R.

THE COPPER TRADE, AND ITS PROSPECTS.

Sir,—There is, it would appear, a general alarm in the Metal Market that the sources of our supply of copper are becoming exhausted, at a time when the demand for that metal is vastly increasing. Under such circumstances it can but be interesting to enquire how far we are justified in drawing such a conclusion, and how far the present production of copper, as compared with that of previous years, warrants us in assuming that the copper deposits of the world are worked out. To appreciate the present, as compared with the past, let us glance at the early history of copper mining in England; and, for the information of those unacquainted with the matter, it may be well to preface my remarks by saying that all metallic produce obtained from English soil was, previous to the middle of the 17th century, the property of the Crown. Before that time it was the privilege of royalty alone to grant charters of metallic produce within certain districts to the favourites of the Sovereign. The first of such grants, in which copper is mentioned, is that given to Walter Galbota, by Edward III., in 1359, of all gold, silver, and copper mines in Cornwall and Devon. Antecedent, however, to the date of this grant the Romans must have known of and worked copper mines in England, since there are remains of furnaces built by them in several parts of England for producing brass. Unfortunately, no record remains of the amount of, or localities from whence the Romans obtained their supplies, nor do we even possess any account of the yield of the mines of Cornwall and Devon under the Royal grant given to Walter Galbota. Passing over, then, these the first vestiges of copper mining in England, and the records of which are little other than matters of tradition, I must mention the mines of Rammelsberg, in Lower Saxony, of the Falun, in Sweden, and of the copper slates of Thuringia, as being all productive of copper, and the chief sources of that metal during the 14th, 15th, and 16th centuries.

To return to our English mines, Carew tells us that at the close of the 16th century copper ores were shipped from Cornwall to Swansea to be smelted. From this date we possess more satisfactory accounts, and Pryce states that at the beginning of the 18th century copper mines were worked to some extent in Cornwall, and from the same author we learn that the yield of copper in Great Britain in 1770 had increased to 27,000 tons of ore annually. This vast augmentation in the yield of our English mines may be attributed to the impetus given to mining pursuits by the abandonment on the part of the king to all claims on the ores of the ignoble metals after our revolution in the 17th century. The restraint on such undertakings being by this limitation of the royal prerogative removed, capital was invested in mineral speculations, and copper mines were opened and worked in England, which, by the abundance of their produce, effected such a revolution in the copper trade as has enabled the market of England from that time to fix the value of this metal in every part of Europe. When we consider the imperfect appliances at the command of the earlier pioneers of the science of mining for developing mineral produce, and that from their want of hydraulic machinery they must have been compelled to confine their explorations to the surface deposits, the yield of our British mines at the close of the 17th century seems almost incredible. In truth, if it had not been for the large amount of copper found near the surface in the Island of Anglesea and in Staffordshire, it would have been impossible to have supplied the increasing demand for that metal in Europe. It is not my intention to follow the gradual improvements in mining machinery from the early days of mining, and with those improvements the increasing depth of mining operations, although such considerations are matters of great interest; it is rather my intention to follow the discovery of those new districts yielding copper, from whence the supplies of that metal have been derived to meet the requirements of the civilised world, and in this it is my wish to pay more particular regard to our home productions. I cannot, however, refrain from stating that the invention of steam, and its application to pumping the water from our mines, originated a new epoch in mineral undertakings, and, moreover, that the first steam pumping-engine was erected on Wheel Vor.

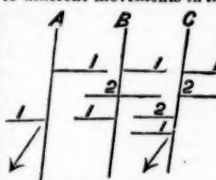
Having given this short historical view of copper mining, I will proceed to examine the localities from whence were derived the supplies of copper at the early part of this century. From Southern Europe, then as now, but small quantities of copper were produced, and I may safely say that the total production of the copper mines in France, Spain, Italy, and Poland did not then exceed 500 tons per annum. On the other hand, from Northern Europe, and especially Germany, large quantities of copper were exported. The chief centres of action there were the mines of the Rammelsberg, in Bohemia; the copper slate mines of Mansfeld, in Thuringia; and the cupriforous veins of the Harz Mountains. Austria also was then prominent as a copper-producing country, and the veins of the same metal in the micaeous slates of Hungary seemed almost inexhaustible. The capricious copper deposits near Falun, in Sweden, proved at the close of the 18th century most productive, are here deserving of particular attention, from their great geological peculiarities. In this short review we have attempted to mention the more important copper-producing districts of Europe at the close of the last and beginning of the present century. Let us now examine the yield of our British mines since the year 1815, and we shall here find a gradual advance in productiveness up to the present day. In this same year (1815) the Cornish mines returned 6607 tons of metallic copper. In addition to this amount, other mines in Great Britain, of which those of the Parys Mountain, in the Island of Anglesea; the Ecton Hill Mine, in Staffordshire; and others in North Wales and Ireland, returned more than 1200 tons in the same year. About the same time considerable importations were made to Europe from the Levant, of copper from the mines of Armenia and the Euphrates, and the copper of the Ural Mountains became first known in Europe. Not only from the East alone were our supplies of copper derived at the close of the 18th century, but also from the West, and South America sent to our market at that time 1500 tons per annum. Almost from their first discovery the mines of Chili have been notorious for their richness, and have long rivalled all those of the known world.

To return to our Cornish mines, we find that in 1825 they yielded 8417 tons of copper, being nearly 2000 tons in excess of their yield in 1815; and that in 1835 the yield had increased to 12,271 tons of copper per annum. In 1845 the returns show a diminished produce in the amount of 12,241 tons, as compared with the yield 10 years before. This figure again increased in 1855 to 12,578 tons; and last year—in 1863, the total production of our mines of Cornwall and Devon was 11,121 tons of fine copper. It cannot be denied that many of our best and richest copper districts in Cornwall have fallen off in their yield of metal; but from the returns we

have given, it will be seen that if we have not our once Great Gwennap Consolidated, and St. Austell Great Crinnis Mines, we have other fields of operation, which have, as yet, prevented any great diminution in the total amount of our copper supplies from Great Britain. And although the demand for this metal has enormously increased with the spread of civilisation over the earth, and our British mines are not as rich as formerly, we may, with some assurance, depend on our foreign sources, and view with complacency the metallic wealth of our colonial possessions. Moreover, when we are told that our copper imports from Chili and South America generally are decreasing, it cannot for a moment be supposed that this decrease is more than a temporary lull in the supplies from that quarter. There are some alarmists who would have us believe that the copper deposits of South America are exhausted, but those who have travelled there, and ridden over the almost boundless tracts yielding copper in that continent, cannot doubt but that as our knowledge of these hitherto desolate wilds shall increase new deposits will be discovered, which shall rival the far-famed wealth of Chanarillo and Tres Puntas. Again, we would ask, do we appear yet to have come to the end of the native copper of Lake Superior? And do not the present finds in Canada warrant us in depending somewhat on that colony for our home supplies? These questions are of great interest, and a fair solution of them can but tend to reassure us, and to lead us to expect for the future an increasing rather than a decreasing supply of copper. We should in this imperfect summary commit a great error if we did not here give the copper mines of South Australia their due prominence. We have lately seen how immensely the exports of this metal from that continent have increased, and how, despite the absurd prejudice that has for so long disturbed mining speculations in that country amongst our English capitalists, new mining districts have been developed, the richness of which seem almost fabulous. P. M. H.

POSITION OF LODES.

Sir,—In reply to "R. W." I may state that I have long been impressed with the idea that both lodes and cross-courses have in many instances been subjected to more than one disturbance, under probably different circumstances and conditions, otherwise certain facts in connection with those veins seem almost inexplicable. A short time since I saw a cross-course laid open some 60 fms. in length, in which several small perpendicular and nearly parallel veins were intersected, one of which had been apparently displaced 8 to 9 feet, another not quite half that distance, and a third not over 1½ foot. Now, had all those veins been formed at one time, we might suppose the "heave" or displacement would have been alike in each case; but as this is not so, I consider it probable they were formed at different times, and also that the cross-courses had been subject to different movements in the same direction. The problem proposed has,



in the same direction, which finally leaves it as now found. I regret not having the original diagram at hand, that I might have used the same terms for the same portion of the section, but I trust I am sufficiently explicit to convey the idea intended. S. B.

APPLICATION OF MACHINERY TO MINING—MOUNT CENIS TUNNELLING MACHINE, INTERIOR OF THE EARTH, &c.

Sir,—I observe you published my remarks on "Mount Cenis Tunnel." I there promised some further observations on the remarks by Mr. Fox on this great undertaking. I am aware that Mr. Fox, like myself, is an advocate for adopting machinery to aid manual labour; but everyone should know that it is not economy to use complicated machinery in the execution of work, when such work can be accomplished by men in less time, and at less expense. It is no use jumping at the conclusion that machinery is to do all the work, and that men are to look on. Man was placed on the earth to labour, and ever will have to do so. I am an advocate for the application of machinery to every useful purpose, when such can be done with economy; but there are so many bubble schemes offered to the public by men of crochets, that it behoves us to be cautious in adopting them. Anyone glancing over the patent list cannot fail to observe how many such schemes must prove failures to one that is really useful. I look with a suspicious eye on all these things. I know the genuine ones to be like Wellington and Bonaparte, few and far between. I might enumerate a thousand attempts to bring machinery to bear on mining, but few of them have succeeded. Giving Mr. Fox credit for all his endeavours, which I know have cost him money and valuable time; still he must not be too sanguine when he calls on practical men to accept his views. They are slow to adopt new ideas, but ever eager to take advantage of what they are convinced will be useful. I do not for a moment attempt to disprove the ultimate success of boring-machines, but very great changes are necessary before that can be. I have advocated the use of them in Cornwall for the last twenty years, but would like to see a shaft bored by one, before I would give it countenance as a success. I carefully read Mr. Fox's opening speech at the Miners' Association, Falmouth. There he thought to have confined himself to Cornish mining. I criticised his remarks at the time rather severely. I am, however, compelled to make a few observations here, being at a loss to know why he was so hurried away as to introduce Blanding or even Boring Cave on that occasion, as it has no reference to practical mining. He slightly touched on mining, for which the practical miners will, I am sure, ever feel indebted. He told them to tamp holes with split sticks instead of kilias stone, which may be a good substitute, but he failed to show its advantages. He also told them to fire holes by the galvanic battery, but did not instruct them in the use of it, or where it was to be placed. I do not know what kind of battery Mr. Fox proposes using, or where he would fix it, to command a mine that has levels and pitches a mile or two apart: would he intend one battery to serve an entire mine, or for every two or four men to have a separate machine? I fear galvanic batteries are too complicated for the use of every miner—were they as simple, cheap, and applicable as lucifer-matches, there might be some chance of their being brought into use; but for general purposes I do not see their utility; although I do not condemn them until I know how he proposes their use. I will make no further comment on his discourse at that meeting just now, but I will next turn to Mr. Fox's remarks on Mount Cenis tunnel. I have his letter before me, and from a thorough examination of the tunnel, I can arrive at no other conclusion than that Mr. Fox, like all other theorists, disliking the sight of lamps underground, did not enter the tunnel, but contented himself with the roughly examining the machine at work boring rock in the tool shop, a mile and a half distant from the tunnel, where they were boring 2½-inch holes in open daylight. He also had access to the books for his statistical account of what was doing. 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therein stated that the Bona Grande profits had already realised a dividend of 7½ per cent. for the nine months' working, equal to 10 per cent. per annum, whereas it is the Don Pedro Company which has just earned that dividend. Allow me, however, most emphatically to contradict the statement which was made in the before-mentioned letter—viz., that negotiations were commenced in this country for the purchase of the Bona Grande property by a director of the Don Pedro Company. The directors have never made any offer whatever for the Bona Grande property, nor have they instructed anyone to make an offer on their behalf; but, as I stated in my previous letter, the offer was made to the directors, who for satisfactory reasons declined it. It may, perhaps, be interesting to persons who intend to become shareholders in the Bona Grande Company to know that the "cash" payment mentioned to the Don Pedro Company was \$8000.

Liverpool-street, Jan. 30. J. E. DAWSON, Sec.

YUDANAMUTANA COPPER MINING COMPANY.

SIR.—A short time since I received a circular, dated Jan. 10, signed "Veritas," addressed to the shareholders of the Yudanamutana Copper Mining Company. A few years since, such a circular would have shook every share of me; now I am so used to the "bears," I take no notice of such circulars, except I may be able to assist some of my brother shareholders in retaining their shares, and thereby defeat this bear "Veritas." As I have the pleasure of doing business with Mr. Higgs, of Penzance, as soon as I saw Captain Anthony's letter in the Journal, I wrote and asked him if he believed Captain Anthony's reports were to be relied on. His reply I enclose, which, if you deem worthy of a space in your Journal, you are at liberty to insert.

J. G.

SIR.—In reply to yours of the 19th, I send you the enclosed extract from a letter I received from Capt. Thos. Anthony, and I may add that you may rely on the truthfulness of his reports. I have no interest in the mines, but no doubt he has a very valuable mining property under his management.

Penzance, Jan. 22. "SAMUEL HIGGS."

Extract from a letter from Capt. Thos. Anthony, of Wheel Blinman, South Australia, dated Nov. 21, 1863, to Mr. Higgs, of Penzance:—"Any ability I possess to carry out the business of a mine owes to you, and I do flatter myself that there is not a mine in this colony that is so conducted as the one I am stationed and spend most of my time at; and that arising from merely keeping the old track as learnt at home in your mines. In this mine the ground is hard, except that the lode is good; then the ground is easy. Our deepest level is 15 fms. from surface, and the lode is 6 ft. wide, and eight men could keep a little Cornish mine above water on it. At one of our mines in Yudanamutana the lode and stratum have both been changed at water level. Above the water the ground about the lode was alternately slate, mixed with lime, Jasper of a coarse kind, and crystalline sandstone. Below that point we have a pretty blue killas, and the lode is black ore; some of that assayed produced 76 per cent. of copper. In this mine we have yet no water, but it is a splendid mine. Up to the present time we have been sending away ore of very high quality, and laying by the low ores for smelting. Our smelting-house is now far on towards completion; the stack is finished, and the first furnace very nearly complete. It will cost in full for smelting 25s. per ton of ore, and when you are told that we have a thousand or two tons of 15 to 20 per cent. lying on the surface, and can keep four furnaces going independent of this, you will see that there is no room for complaint, after only 18 months' working; and I believe we have sent home from this mine alone about 10,000 lbs. worth of ore of high percentage."

NORTH DOWNS MINE.

SIR.—The printed report of North Downs has been just issued to the shareholders. It will be noticed that, although a call of 2s. 6d. a share was made at the meeting, there was only 900. 0s. 2d. against the mine, four months' costs being charged against four months' ore, and the 129 tons just sold not reckoned in the accounts. The shareholders will be pleased with the report, but they would have been much more so had the telegram received on the day of the meeting been inserted in it. That telegram stated that "the lode in the shaft had improved to 201. per fathom," and on the following day another was received at the office, saying that "it had further improved to 301. a fathom." Now, as this discovery was made 20 fathoms under the elvan, it is considered of the utmost importance to the mine, and yet, strange to say, not a syllable is stated of the value in the report. Is there not some neglect here? If the *Mining Journal* had not mentioned the above discovery last week, the distant shareholders who did not attend the meeting, or who do not subscribe to the Journal, would even now be ignorant of any discovery having been made in King's shaft beyond "stones of ore." I advise shareholders to have patience for a month or two. Better times are coming for North Downs.

A CAUTIOUS MAN.

NORTH DOWNS MINE.

SIR.—I have just received the report of North Downs. I would ask the committee and the secretary how it is that no mention is made in the report of the telegram received on the day the meeting took place, saying that the lode in King's shaft had improved from "stones of ore" to the value of 201. a fathom? also of the telegram received the next day, stating "that it was then worth 301. a fathom?" What are the secretary and committee paid for, if not to take care of their employers? I consider that it is time for them to wake up. There can be no excuse for their omission of the first telegram, as it arrived whilst the meeting was on; and if they say that the report was sent to the printers before the second telegram arrived, surely—as the particulars of the meeting were not posted for about a week after the meeting took place—a slip of paper should have been printed, mentioning the particulars of the second telegram, and sent to every shareholder with the report. The satisfaction would have been great, and the expense a mere trifle. The *Mining Journal* last week was, of course, aware of the discovery, but there are many who, by acting on the "penny wise and pound foolish" system, refuse to subscribe to the Journal, and therefore know nothing about it. Can it be wondered at that the shares are falling in price?

A SHAREHOLDER.

CENTRAL GRYLLS MINING COMPANY.

SIR.—In the notice of this company in last week's Journal, you speak only of a copper lode, and omit to mention the important fact that the Georgia tin lode, so productive in Wheal Grylls, runs through this property, which fact is admitted by the secretary of that company, in his communication to the Journal of Jan. 16, and our agent writes us that it is large enough to give £100,000 worth of mineral. It is important that this should be explained, as otherwise it may leave an erroneous impression on the minds of your readers that would not be to the advantage of the company.

95, Gracechurch-street, London, E.C., Feb. 2. HENRY RHODES, Sec.

THE MINERS' ASSOCIATION OF DEVON AND CORNWALL.—The general meeting of this society was held at Redruth, on Friday—Mr. C. Fox presiding. The secretary, Mr. Pearce, read the reports, from which it was seen that "the demands for the teachers have been beyond our means, and several important districts, which have applied for our assistance in the formation of classes, are still without this aid. The value of the association is unmistakably proved by the fact that several of the students in its classes have been selected to fill offices of trust, and situations requiring superior knowledge, both at home and abroad. The president has liberally given a donation of 50l. to the association, and he expresses his hope that the example set by Mr. Enys and himself may be followed by other gentlemen connected with mining, or owning mineral property, to the extent of relieving the association from debt. During the past year courses of lectures have been given in eight districts, embracing the principal mining localities of the two counties, and about 1500 working miners have attended these lectures, not including a much larger number which attended the popular lectures which have from time to time been given in the various districts. The subjects which have been taught are—mechanics, mechanics, travelling, surveying, mineralogy, mining, geology, and metallurgy. In nearly all the districts the miners who have attended the class lectures have shown by their diligence and attention to the various subjects taught that the instruction has been much appreciated. The income has more than met the expenditure, and we have been enabled to reduce our debt by the sum of 50l. This increase in our funds has in a great measure arisen by two liberal donations of 50l. each, respectively from Mr. J. E. Enys, in February last, and from Mr. J. B. B. in April last, and in part from additional subscriptions to the amount of 40l. from the miners. We have also had many new subscribers to the fund—making a subscription of 391. 0s. against 320l. last year. The minutes contained a record of the appointment of Messrs. R. Pike, W. M. Grylls, and the Rev. S. Rogers, as the executive for the ensuing year, and of Messrs. Bolitho and Vivian as vice-presidents, in the room of Messrs. Treffry and R. Fox, who retire by rotation.

LECTURES FOR WORKING MEN—METALLURGY: SILVER.—Dr. Percy gave a lecture on this subject, at the Royal School of Mines, Jernyn-street, on Monday last. Silver was known at a very remote period; it is the whitest of all metals, not excluding tin. It is a very malleable and ductile metal—a grain of it may be drawn into a wire fully 400 ft. long. Silver melts at a red heat. Its specific gravity 10.5, atomic weight 108. It does not suffer any sensible change when heated in a dry atmosphere, but when heated in contact with oxygen at a high temperature it does not oxidize, but absorbs this gas, giving it off when cooling. Silver has a strong affinity for sulphur, as may be well seen in London. The lecturer then alluded to what is called caldised silver, which, he said, is a misnomer, being "brimstonised." Reference was now made to Pattinson's process of desilverising by means of cupellation. The Mexican amalgamation was then explained. It consists in stamping the ore, and subsequently reducing it to a state of mud by means of crushing mills—arrastres. It is now mixed with copper pyrites, magistral, and common salt; after so prepared and trodden cut by mules, mercury is added through a filtered bag. The chemical changes involved are complicated in their nature, the result gained is a proto-chloride of mercury, and an amalgam of silver and mercury; this amalgam is reduced by the application of heat, which drives off the mercury in a state of vapour, and the silver is obtained pure. There is a great loss attendant on this process, fully 35 to 40 per cent. The lecturer then gave a description of the Freiberg and wet methods for the extraction of the metal.

OPEN MINE SHAFTS.—An inquest on the body of Mary Bawden, who died from falling down an open shaft at Unity Wood Mine, near Chace-water, Cornwall, was concluded on Tuesday afternoon. The jury, in returning a verdict of "Accidental death," expressed their regret that abandoned and other shafts in Wheal United Wood had not been properly fenced, in accordance with the covenants of the sett. They hoped also that lords and adventurers would see the necessity of securing all shafts in a safe condition, and suggested that in the meantime the waywardens of mining parishes should give notice to all shafts in their neighbourhoods requiring protection; also, that the attention of the Home Secretary should be called to the statute 23d and 24th Vict., cap. 151, with a view to the extension of its provisions to mines of this description.

PREVENTING INCrustation OF STEAM-BOILERS.—Mr. John Travis, of Royston, Lancashire, proposes the use of Irish moss, or silicate, arsenate, or phosphate of soda, to prevent incrustation of steam-boilers. From 6 lbs. to 8 lbs. per week usually suffices for a 40 or 50-horse power boiler.

INDURATION OF STONE.—Mr. F. S. Barff, of Dublin, for preserving and hardening brick, stone, and other surfaces, and timber, proposes to use soluble silicate of soda, or of potash, by preference the silicate of potash with a mixture of sulphate of barite and carbonate of lime. The mixture is laid on with a brush.

Meetings of Public Companies.

LONDON AND COUNTY BANKING COMPANY.

The general meeting of proprietors was held at the London Tavern, on Thursday, Mr. NICOL, M.P., in the chair. Mr. CLAPPISON (the secretary) having read the notice convening the meeting, submitted the report of the directors, which appears in another column.

The CHAIRMAN said the balance-sheet had given the proprietors the account of the result of the business of the bank during the past year, but they, no doubt, naturally wished to have some details to show the progress that had been made, the position the bank at present occupied, and its future prospects. During the last two years there had been a steady increase in business and profits, and the report submitted to-day certainly did not show that there had been a falling off. In 1862, 1863, the balance due to customers stood at 7,151,130l., and the liabilities on acceptance 419,388l., making together 7,570,518l. In December, 1863, the balance due to customers was 8,245,722l., and liabilities on acceptance 1,688,910l. Those items in favour of 1863 showed an increase in customers' balances of 1,094,592l., and in other liabilities 722,548l. On the other side of the account, in December, 1863, the Government and other stocks amounted to 755,899l., and in December, 1862, to 950,095l., showing an amount in favour of 1863 of 194,196l. Bills discounted, and other sources of profit in December, 1862, amounted to 5,945,722l., and in 1863 to 6,794,844l., making a difference in favour of 1863 of 1,439,110l. The gross profits in 1862 were 288,129l., and in 1863, 412,625l., leaving a difference in favour of 1863 of 124,496l. The gross profits of this bank were now greater than any other joint-stock bank in England, and, perhaps, in the world. It must be added that their expenses were also heavy, for there were now 128 branches, and 655 persons employed; and that, notwithstanding the new banks that had been established, theirs (the London and County) had added no fewer than 9615 new accounts during the past year, making the total number 35,681. During the last half-year two new branches had been established, one at Hackney and the other at Limehouse, and both were beginning to give promise of being very successful; and a branch office had been taken in Holborn. Several country branches had also been opened; in fact, there being so much competition, it was their duty to be vigilant, so as to maintain the ground this bank had acquired. He mentioned that the decision given by the Master of the Rolls in a suit brought against the bank had, under the advice of two of the most eminent members at the Chancery bar, been appealed against, under the full conviction that it would be reversed in a superior court. Although the directors entertained little or no doubt that such would be the result, yet they thought it prudent to carry forward a larger sum from the profits of the past half-year than they would have done but for that decision. He now came to another point, which was this—the directors thought that the time had arrived when the London and County Bank should take a foremost position among joint-stock banks; with that view, the directors thought it advisable to largely increase the capital. When this operation had been completed, the capital would be three-quarters of a million and the reserve fund a quarter of a million, making together a million sterling. For years past it had been their policy to increase the reserve fund, but he hoped, when this great increase of capital had been made, there would be no longer an occasion to add further to the reserve fund, but that they would be able to divide all the profits the bank made. He intimated that the capital would be called up during the ensuing fifteen months. Taking the present rate of interest into consideration, it was thought to be advisable to press as lightly as possible upon shareholders in making this addition to the capital. It was proposed to call up the money in instalments of 10s. 6d. on acceptance, and 10s. 6d. on the reserve fund. The capital called-up would be entitled to the full share of dividend. It was proposed to call the first instalment on March 15, the second on August 15, the third on Dec. 15, and the fourth on April 15, 1865; but it would be in the power of those shareholders who chose to pay up in full, and to receive the full dividend upon the amount paid. Having stated that everyone connected with the bank could look upon its position with a great degree of satisfaction, and that they might look forward to a bright future, he concluded by moving the adoption and reception of the report and accounts. Mr. CHAMBERS JONES (deputy-chairman) seconded the proposition. A PROPRIETOR congratulated the directors upon the manner in which they had managed the bank, which was now one of the established monetary institutions of the country.—The CHAIRMAN (in reply to a question) stated that two sets of inspectors were constantly employed in thoroughly examining the accounts at the several branches. The report was received and adopted unanimously, and a dividend of 6 per cent., together with a bonus of 6 per cent. (both free of income tax), for the half-year, were declared.—The retiring directors were re-elected, and the auditors were re-appointed; Mr. NORMAN was appointed auditor.

Mr. GULD proposed a cordial vote of thanks to the Chairman and directors for the able manner in which they had conducted the affairs of the bank.—Mr. RUSSELL seconded the proposition, which was put and carried unanimously.

The CHAIRMAN acknowledged the vote, and stated that if any one thing were more satisfactory than another to a board of directors it was such a vote as that just passed. And the manner in which it had been received by the shareholders he felt assured would act as an incentive to the directors to redouble their exertions for the benefit of the bank. A special vote of thanks was passed to Mr. McKean, the manager, who acknowledged the vote in appropriate terms.

Mr. CLAPPISON (the secretary) acknowledged the vote of thanks to the officers of the bank. The proceedings terminated with thanks to the Chairman.

EAST ROSEWARNE MINING COMPANY.

A general meeting of proprietors was held at the company's offices, Austinfriars, on Monday.—Mr. J. ROWLANDS in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. A statement of accounts for four months, ending with costs for Nov., was submitted, from which the following is condensed:—

Balance last audit	£ 263 15 2	
Copper ore sold	2073 4	= £2336 19 6
Aug. mine cost, merchants' bills, &c.	£ 504 3 0	
Sept. ditto	435 18 8	
Oct. ditto	480 15 3	
Nov. ditto	497 19 4	= 1916 13 3
Leaving credit balance	£ 420 6 3	

The report of the agent was read, as follows:—
Jan. 29, 1—I herewith inform you that in the past four months Hallett's shaft has been sunk 1 fm. to the 75, on a lode about 1 ½ ft. wide, worth for length of shaft (10 ft.) 10l. per fathom. We have driven the 75 east 4 ½ fms., on a lode about 8 in. wide, producing a little ore, but not much to value. In the present end the lode is a little more promising in appearance, and producing stones of ore. I think there is another branch to the south; this will shortly be proved by cutting a flat east of the shaft. We have driven the 75, west of Hallett's, 9 fms., on a lode about 1 ½ ft. wide, and in value from 10l. to 20l. per fm. The average value of ground opened in this level is about 16l. per fm. In the present end the lode is 2 ft. wide, of a very promising character, worth 20l. per fathom; this is under the slide, and there is every reason to expect that it will be equally good over it, as it was so at the shaft. We have two men stopping the back of this level, where the lode is 18 in. wide, worth 16l. per fm. We have driven the 65, west of Hallett's, 5 fms., on a small unproductive lode, and in the elvan about 9 feet. This being poor and hard, we have suspended the driving, and as we can drain the western ground by road through King's shaft, there will be no necessity for driving through the hard elvan in every level. We have also driven this level on a south branch about 6 fms., which was worth for a small length 12l. per fm., but is poor in the end, and suspended. These branches will intersect a little below the level, and there is every reason to calculate on a good lode from this intersection to the 75, as we have it there. The pump-winch has been sunk 2 fathoms to the 65, on a lode about 10 in. wide, worth 9l. per fm. The 65 is driven east of winch 4 fms., on a lode from 9 to 18 in. wide. A small lode, the 65, has been driven north at times 8l. per fm.; this driving is suspended, as we are stopping the end of ground to the depth of the level. The lode in the present end of ground and back varies in value from 12l. to 22l. per fm. The 65 is driven west of pump-winch 9 fms. 5 ft., on a lode about 1 ft. wide; the first 8 fathoms is worth 10l. to 12l. per fm.; for the last 2 fms. the lode has been split into two parts, both poor in the end, but the south part bearing a good branch of ore in the back of the level. These branches are now closely approaching each other, and the south one is levelled. We have driven the 55, west of Hallett's, 14 fms., on a lode about 14 in. wide. We have driven the 55 west 1 ½ fms., on a small lode, producing a little ore, but not to value; this driving is suspended for the present. Within about 3 fathoms of this end we are rising against King's shaft, and are up about 7 fms.; for the first 4 fms. the lode produced stones of ore only, but in the last 3 fms. it has been improving, and is now 14 in. wide, worth 10l. per fm. When King's shaft is completed to that level, it will be an inducement to drive the 55, when King's shaft is completed to that level. We are working two stops in back of the 55, one at the surface, and one at 14 ft. per fm. We have driven the 43, through King's shaft, there will be no necessity for driving through the hard elvan in every level. We have also driven this level on a south branch about 6 fms., which was worth for a small length 12l. per fm., but is poor in the end, and suspended. These branches will intersect a little below the level, and there is every reason to calculate on a good lode from this intersection to the 75, as we have it there. 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EAST DEVON CONSOLS.—At the meeting a call of 1s. 6d. per share was made, and all passed off satisfactorily. In addition to the captain's regular report, which is of a most encouraging nature, a report was also presented by Capt. Goldsworthy (of East Wheel Russell), who has specially inspected the mine. In this report he says:—“The stratum which the cross-cut has been driven in during the last 15 fms. is a light **killas**. The branches dipping north contain quartz, yellow copper ore, &c. I consider

Mining Correspondence.

BRITISH MINES.

the stratum to be a mineralised one, as precisely the same kind as that found in connection with the rich lodes in the Devon Great Consols. The cross-cut I consider a good speculation, as there is but little doubt that the Devon Great Consols lode is before you, which you may expect to cut shortly, and also other lodes known to exist to the north. . . . Provided the same stratum continues, there is every reason to expect good results when the lodes are intersected. This coming from one of so much experience, as Capt. Goldworthy, especially in that locality, seems certainly of some importance. At the present moment there is, perhaps, no more interesting point to come off in the mining world than that which is to decide whether the Great Devon Consols people have by some freak of Nature got it all to themselves or not. The shareholders of East Devon Consols are disposed to think not.

PENDESIDE CONSOLS.—The stamps are at the present time returning above 5 tons of tin per week. Notwithstanding the quantity of tinstuff required to form the floors, and the necessary delays invariably occasioned when starting new tin-stamps, it is fully expected that 35 tons of tin and 110 tons of copper ore will be sold for the two months, and before the meeting on March 1. The tin will average between 67% and 68% per ton. Expenses for the two months about 1400%.

FOREIGN MINES.

ST. JOHN DEL REY.—Produce, 10 days of Dec., 10,630 oits; yield, 5-737 oits. per ton. The hauling chains breaking twice, caused a deficient supply of ore; now working regularly.

UNITED MEXICAN.—Guanaxuato, Dec. 19: Mine of Jesus Maria y Jose: All work connected with the shaft having been completed, the new cross-cut of San Carlos, which will explore a large extent of the vein, and at a great depth, has just been resumed. The frentes of San Juan has much improved, it is 4 varas broad in the eye, with the pozos and contratiello, will produce a considerable amount of 1200 cargas per week for the hacienda; the necessary supply of about 1200 cargas, except that extracted by the hacienda, which, in four weeks, has been 2495 cargas, sold for \$10,683, half on the mine account. The result of last month was an apparent loss of \$3186, gold, as before, not included; but this day two raspa have been received, worth about \$16,000, and this will ensure a fair profit on the three months. Remittance: I have availed myself of an opportunity to obtain bills on Paris, at 60 days' sight, to the sum of 190,600 francs, and I shall be enabled to send an equal or larger sum as soon as a conducta is dispatched or more bills can be procured. Note: The directors are in receipt of the above-named bills.

COPIAPO.—G. Matthews: Checo Mine: In the 60 fathom level, east of Price's shaft, the lode in the end driving east is poor. In the 65 chiflon, sinking east, the lode is 2 feet wide, producing some good stones of ore—very promising. In the 65 chiflon, sinking west, the lode is 2½ feet wide, but poor. In the 50 fathoms, east of Price's shaft, the lode in the end driving west, is 3 ft. wide, producing a small quantity of ore—very promising. In the 50 No. chiflon, sinking west, the lode is still very promising, but not profitable as yet. In the 40, west of Price's shaft, the lode in the chiflon is much the same as when last reported. In the 40 fathoms, level winze, spoken of in our last remarks, we have commenced to sink at the bottom; the lode is 1½ ft. wide, but poor. In the 50, at Harman's shaft, the ground in the cross-cut is very hard for driving. Eastern New Ground: The lode in this chiflon is 2 ft. wide, containing a little ore, but not to value. Western Sett: In the 10, east of new shaft, the lode in No. 1 chiflon is much the same as when last reported; we shall now commence to sink west in order to make a foot communication with the 30 fathoms level end, driving east. In the 10 fathoms, level winze, the lode is still poor. In the 30, end driving west, the lode is still producing some good stones of ore. There is no change in No. 2 chiflon since our last report. In the western new ground the lode in the chiflon is still poor. Account of Ground Sunk in Nov., 1863: Eastern new ground sunk, by two men, 6¼ varas, at \$12 per vara; the chiflon west of new shaft, by three men, 9 varas, at \$9 per vara. The number of men employed in Nov., 1863, was—Englishmen, 10; natives, 67; total, 67. Remarks: We shall commence to sink the new shaft below the 30 fathoms level on the 19th of this month.

MARIQUITA AND NEW GRANADA.—Dec. 4: Santa Ana: Cost for Sept., \$14,720; returns, \$17,816. In the 110 and north the lode is about 5 ft. wide; there is no change in the mine. The stope in the bottom of the 110, north of the winze, the lode is about 7½ feet wide, and very rich throughout, producing rich dry stamps mineral; the ground is very hard in these stops. They are set at \$75 per fm. In the stope in the bottom of the 110, south of the winze, the lode is about 11 feet wide, producing rich dry stamps mineral; it is divided by a horse of kilaas, and its character and quality are the same as last reported—set at \$65 per fathom. In the stope in the back of the 110, north of the winze, the lode is about 6½ ft. wide, producing rich dry stamps mineral; about 6 tons per fathom. In the stope in the back of the 100, south of the flokan, the lode is about 2 feet wide, producing small branches of dry stamps mineral; it is suspended for the present. In the stope in the back of the 80, north of the flokan, the lode is about 2 ft. wide, producing good wet stamps mineral, and also a little dry; set at \$40 per fathom. The new shaft was sunk 3 ft. below the 100 last month; the ground is hard for sinking. It is now 10 ft. below the 100, and the lode in the back of the 100 is up 10½ feet above the level; I hope to get these stations completed in about three months, and also in the same period to have the ship-shaft mated in about 100, as we have two pairs of men employed about it. In the cross-cut, west of north, in the 70, on the flokan, the ground is easy for driving, and there is no change in its appearance; set at \$25 per fathom. Birchall's lode is about 1½ ft. wide, producing rich branches of pyrites and grey silver. Since we have driven through the cross lode (which is only about 8 inches wide) the ground is more settled, and not quite so hard; as we are just now entering the mountain, we may look forward to some appearance to the lode. The east lode at this level at intervals with sick ponds, over a period of more than two years, and it is now driven about 9 fathoms in the mountain. We hope in about 30 or 40 fathoms more driving to cut the junction of the flokan, which has made all the mineral in the Santa Ana Mine, and we have at least 100 fathoms of backs. If it should turn out to be a good lode, it can be worked at comparatively little cost, as there will be no water charges, nor expense of drawing mineral. The prospects of the mine continue very encouraging.

DON PEDRO NORT DEL REY.—Capt. T. Treloar reports the produce for November to be 2440 oits. This is the largest quantity yet raised, and an excess of 415 oits. over the produce for October. The exploratory works have been resumed, and every effort made to push on with them. The appearance of the stone at some of the points is encouraging. We hope shortly to commence sampling at Maguine. The sanitary state of the force is better than when last reported. None of the cases at present in hospital are dangerous, and measures that I am at present adopting for the distribution of the force in the barracks, as well as for the better ventilation of same, will, I hope, have a beneficial effect.

Feb. 4.—The directors have just received a remittance of 6550 oits. of gold. Captain Treloar reports that the produce to Dec. 20 amounted 1824 oits., notwithstanding that the wet season had been prevailing with great severity. He states that gold was visible in one of the samples which he had taken from Maguine.

LAGUNA.—Dec. 24: The sinking of the shaft has proceeded, with some interruptions from fast days, and the depth sunk will be about 2½ varas in the month; 100 cargas of silver have been obtained from the ore sent to San Pascual hacienda. That there were at that date in stock, preparing for another sort, about 60 cargas of ore. The vein in the shaft produces larger stones of rich ore, but not so much of an ordinary class as previously; and that the quality of the ore may be expected to improve in depth.

LUSITANIAN.—Jan. 23: Palhal Mine.—Basto's Lode: We began sinking Taylor's diagonal engine-shaft below the 60 on the 20th inst., where the lode is worth 4 tons per fathom. The lode in the 8, west of Taylor's, is 2 ft. wide, composed of quartz and stones of ore. In the 80, east of same shaft, the lode is worth 3 tons per fathom. In the 70 west the lode is 4 feet wide, having a branch of ore worth 1 ton per fathom. The 70 east is worth ½ ton per fathom. In the 60, west of Taylor's, the lode is composed of flokan and strings of ore, mixed with the country. In the 50, west of the lode, the branches are small and poor; in this level being driven on the course of Basto's lode, to get under Perez's shaft. In the 38, west of side lode, the lode is 1 ft. wide, yielding 1 ton per fathom. In the 8, west of Perez's shaft, the lode produces good stones of ore. No. 1 stope, west of Francisco's winze, are worth 1 ton per fathom. No. 3 stope, west of Perez's shaft, are worth ¾ ton per fathom. No. 4 stope, east of Francisco's winze, are worth ½ ton per fathom. No. 5 stope, east of Patrio's winze, are worth 1 ton per fathom. No. 6 stope, east of River shaft, are worth ¾ ton per fathom. In No. 7 stope, west of Basto's winze, the ore is small and poor; in this level being driven on the course of Basto's lode, to get under Perez's shaft. No. 8 stope, east of Basto's winze, are worth 2 tons per fathom. No. 9 stope, above the 60 fathoms level, are worth 2 tons per fathom. No. 10 stope, west of River shaft, are worth 1 ton per fathom. No. 12 stope, west of Joaquin's winze, are worth 1½ ton per fathom. No. 16 stope, west of Norie's winze, are worth 1 ton per fathom. No. 17 stope, east of Nunes' winze, are worth 2 tons per fathom. No. 18 stope, west of Taylor's shaft, are worth 1 ton per fathom. No. 19 stope, are worth ¾ ton per fathom. No. 20 stope, east of Norie's winze, are worth 1½ ton per fathom. No. 21 stope, east of Taylor's are worth 1½ ton per fathom. No. 23 stope, are worth 1 ton per fathom. River shaft is suspended for the present, in consequence of an increase of water; this difficulty will be removed as soon as the 70 fathoms level, east of Taylor's, is sufficient to let it down, the sinking will again be resumed. The lode in Serafin's winze, below the 60, is worth 1 ton per fathom. Mill Lode: In the 60, east of side lode, the lode is worth ¾ ton per fathom. No. 22 stope, west of River shaft, are worth ¾ ton per fathom. No. 15 stope, between the cross-cut and side lode, are worth ¾ ton per fathom. The lode in the 50, west of Mill Lode, are worth 1 ton per fathom. No. 2 stope, east of Rode's winze, on the Mill lode, are worth 2 tons per fathom. Great Counter Lode: No. 14 stope, west of the side winze, are worth ¾ ton per fathom. No. 15 stope, west of Martinez's winze, are worth 1 ton per fathom. Slide Lode: In the 28, west of Mill lode, the lode is 2 ft. wide, composed of flokan, mixed with the country. The ground in Oak engine-shaft, below the 40, is just as it has been for some time past.—Carvalho Mine: The incline shaft is suspended for a time, in consequence of there being so much water, rendering the sinking very slow and expensive. The 30, east of incline shaft, is also suspended, and the men removed to drive the adit level, west of same shaft; the lode is 2 ft. wide, composed of quartz, and at times strings of lead appear in a north branch, but not enough to value. We have commenced driving an adit level west of the Calmer, on a north lode, or on a north part of the lode on which the incline shaft has been sunk; the lode is 2 ft. wide, composed of quartz and oxide of iron, and the ground about it is of soft gneiss.

WEST CANADA.—Capt. Plummer, Jan. 1: Huron Copper Bay: The new engine-shaft is down 6 fms. below the 20; the ground has been slow for cutting, and the water has much increased; we have increased the number of hands so as to push the work faster. The stope in the east and west of this shaft, below the 10, are unchanged, yielding about 4 tons per fathom, with prospects of its continuance for some time to come. The stope on the west of Palmer's yields from 5 to 6 tons per fm. The lode in Bray's shaft is yielding well, but the shaft is slow for sinking; we have put an additional hand at this point, in order to make greater dispatch. The stope in the east and west of Carmichael's winze are yielding respectively 4 tons per fm., and the stope on the east and west of the whin-shaft (fire lode), are worth 2 tons per fm.—Wellington: Grenfell's shaft is now down 4½ fms. below the stope, and we intend to sink about 6 feet further for a fork; the lode in it is wide, and worth from 1½ to 2 tons per fm. The 30, east of Crase's, is worth 2 tons per fm., and the level going west is of a similar character; each of these drifts is slow for driving. The stope on the east and west of Glenville's shaft are yielding 2 tons per fm., and are likely to continue at this rate for some time to come. The stope on the east of Hooper's is yielding 3 tons, and does not yield more than 1½ ton per fm.; on the west of this, however, the lode is poor, and does not yield more than 1½ ton per fm. On the east of Knight's (fire lode) the lode is large, and worth 3 tons per fm.; on the west of this the lode is disordered by a horse of trap intruding in the middle of the vein. The stope on the west of Jack's winze is poor, yielding from 1½ to 2 tons per fm. The lode in the winze below this, east of the cross-cut, is yielding 2½ tons per fathom, and good dispatch is being made in sinking. The tribute pitches are continued at the same price per ton. We raised for the past month 272 tons, and dressed 207 tons of ore. We have in the past month stopped to repair our engine, and have, moreover, had a continuance of snow storms, which combined have prevented us dressing our usual quantity.

BEDFORD CONSOLS.—J. Mitchell, Feb. 2: In the middle adit level east the north lode in the present end has made a splice, but I hope to see it open up again in course of a short distance further driving.

BEDOL-AUR.—T. Pierce, Jan. 30: The pulley shaft is down 55 yards on Simon's vein; and another 15 yards it will be sufficiently deep to reach the Brynla vein, from which we expect to get a great deal of ore. The shaft is rather hard just at present, but there is no appearance that it will continue so long. The 50, north-east of shaft, is very promising indeed; the vein at the present level is from 5 to 7 in. wide, composed of spar and nice leaders of lead ore, and in which we expect to drop on good ore daily.

BILLINS.—F. Evans, Feb. 3: We are sinking the engine-shaft at the rate of 3 ft. a week, and we think to be deep enough to drive out in about six weeks from this date. I have no doubt of the success of the undertaking.

BOSCAWEN.—J. Edwards, R. Giles, Jan. 30: At the 80, driving west of Hunter's shaft, the lode is about 10 in. wide, producing stones of copper ore, but not to value. The lode in the 70, driving west of said shaft, is 2 ft. wide, worth from 25 to 30, per fathom for copper ore. The lode in the rise in the back of this level, east of No. 1, is 20 in. wide, worth 10, per fathom. The lode in the stope west of No. 1 winze, in the back of the said level, is 20 in. wide, worth about 20, per fm. At the 60, end, west of Hunter's shaft, the lode is 2 ft. wide, worth about 4, per fm. The lode in the stope in the back of this level, west of No. 2 winze, is worth from 12 to 14, per fm. The stope east of No. 3 winze, in the back of this level, is worth 12, per fm. The counter shaftmen are still engaged timbering and securing the same from the deep adit to the 30.

BROSFLOYD.—Jas. Lester, Feb. 3: We have no alteration in the character of the ground in the 52, except an increase of water is issuing from the forebreast. I have moved the men driving the 27, west of long winze, and set to cross-cut through the lode, 5 fms. bargain, at 75, per fm. I have suspended the 40 west, and have set the men to take down a piece of the lode behind the end. For the last five or six weeks but little has been done in the stope over the 40, the men having been employed in picking over the ore stuff accumulated at the bottom, tramming and throwing down stuff from the upper levels, building walls, &c. We have now resumed stopping by 12 men; the lode yielding about 1 ton per cubic fathom. On Saturday we shall sample a parcel of ore, computed 50 tons, for sale on the 15th.

BRYNFORD HALL.—Thomas Pierce, Feb. 4: We are still looking much better at Davies's vein, west from Dunford's sump. The forebreast of the 77 yard level is full of good saving stuff, and if it continues as it now is, it will soon pay for all the expense that has been incurred in opening this mine; indeed, it is looking well. The 36 yard level, north-east from Trainger's shaft, has been driven 37 yards; the vein now runs due east and west, and is about 14 inches wide, full of clay and spar, and nice lumps of ore. We may look daily for an improvement here. In the 83 yard level, south-west from the forebreast, the vein is very large and promising. We are cutting 4 feet wide along the vein, and for the last 3 yards driving have not seen either wall: it is full of spar and nice lumps of ore. I expect every day here to drop on a good bunch of ore.—Milver Vein, at Brynford: The forebreast of the 94 yard level is very hard and poor for ore, so I have put the men to sink below the level, just on the spot where we had a bunch of ore a few days since, which has gone down, and which we shall now follow below the level. The air is bad in this pit.

BRYNTAIL.—Jas. Roach, Feb. 4: The lode in the 20, west of new engine-shaft, is nearly 2½ ft. wide, and is still worth 30, per fathom for lead ore; the best part of the lode is in the bottom of the level; I hope to resume the driving of this level, east of shaft, about Tuesday or Wednesday next.

BULLER AND BASSETT UNITED.—W. Pascoe, S. S. Rice, Feb. 1: At the 80 east the lode is 3 ft. wide, chiefly made up of muddle, spar, and peach, with a little copper ore, and is worth 10, per fathom. The flat-roof shaft, north of it, looks promising, accompanied with a good run of ground; we intend driving in this channel, and then occasionally as required cut out and prove the lode. In both the 80 east and 60 west the favourable run of ground facilitates the working, and is also an important feature in connection with the formation of mineral in this district. The south lode at the 80 west appears at present hardly as promising; in driving west we hope for a favourable change. We are desirous of pushing on the workings with all possible speed, and using our best efforts to do so within the least possible expenditure.

CARADON CONSOLS.—W. Rich, Feb. 2: The engine lode, in the 80 east and west, is 2 ft. wide, regular and well defined, and is yielding good stones of ore, embedded in a beautiful matrix of fluor-spar and peach. The south lode is composed of fine looking gossan. We are within the influence of the cross-course on the north lode; the ground, however, is easy and inexpensive for working. There is no change to notice in the south cross-cut; we are forcing on this end by six men; 8 fms. 3 in. were driven here during the past month.

CARADON VALE.—J. Barkell, J. Johns, Feb. 3: The following is a statement of the work done in January, and the setting account for February:—The engine-shaft has been sunk 1 fathom 5 feet 6 inches, and re-set to sink by nine men, at 21, per fathom. We have now a very little elvan in the shaft; in consequence of its underlying south about 2½ feet in the fathom, it is nearly all gone to the south of us, and the shaft is almost entirely in kilaas, which is highly mineralised, being interspersed with frequent branches of muddle. We think the lode is still a little north, as the water is issuing strongly from that direction. The flat-roof shaft, north of it, looks promising, accompanied with a good run of ground; we intend driving in this channel, and then occasionally as required cut out and prove the lode. In both the 80 east and 60 west the favourable run of ground facilitates the working, and is also an important feature in connection with the formation of mineral in this district. The south lode at the 80 west appears at present hardly as promising; in driving west we hope for a favourable change. We are desirous of pushing on the workings with all possible speed, and using our best efforts to do so within the least possible expenditure.

CARDIGAN CONSOLS.—James Sanders, Feb. 3: The lode in the 20 east is 6 feet wide, and is yielding 10, per fathom. In the 10 east the lode is 2 ft. wide, but poor at present. The stope are yielding much as formerly—about 1 ton per fm. No lode has been met with in the cross-cut north as yet. The lode in the level driving east from Sander's shaft is 5 ft. wide, with a mixture of copper ore, but not sufficient to value. Our dressing is going on regularly, and, if the present favourable weather continues, I expect our sampling on the 13th inst. will be about 40 tons of copper ore.

CAEGRACH MINE (Clogau Consols).—C. P. Owen, Jan. 31: No. 1 level in No. 2 lode is gone, and looks very well, containing small specks of lead and silver in the side of the hanging; the quartz is red in colour. In the heading side the quartz is blue; the lode in the forebreast, which is hard quartz, is 5 ft. wide. In the east part of the mine, on No. 3 lode, in the side of the hanging there is strong gossan quartz. In the heading side there is quartz between red and blue, and some nice small specks of gold in this lode on Thursday by wagon, and on Friday ore. The lode in the 10 east is 2 ft. wide, but poor at present. The stope are yielding much as formerly—about 1 ton per fm. No lode has been met with in the cross-cut north as yet. The lode in the level driving east from Sander's shaft is 5 ft. wide, with a mixture of copper ore, but not sufficient to value. Our dressing is going on regularly, and, if the present favourable weather continues, I expect our sampling on the 13th inst. will be about 40 tons of copper ore.

CHIVERTON WHEAL ROSE.—J. Phillips, Feb. 2: Milated's Lode: We are still driving on the south part in the eastern end, this having been the leading part, but the north part seems to be at present the best; in 1 or 2 fms. further driving in this direction we shall be able to ascertain the north part falls in with the south, and should it prove to be one and the same, it would be 10 ft. wide, composed of peach, quartz, muddle, and more quartz. In the north end the lode is very kindly, and we think we are nearing the great counter, on which the ventilation-shaft is being sunk; the lode in the shaft is about 4 ft. wide. We have discovered near the eastern boundary of the sett, in the Gannell river, two splendid-looking lodes, composed of the most kindly-looking white flokan, quartz, &c., that can be seen, the one an east and west lode, and the other a north and south lode, both of them about 10 ft. wide, and of great value. We think the engine-shaft will cross this lode about 100 fms. deep. We must have passed this lode in the level going east on Milated's lode, but being disordered we must have taken no notice of it. These two lodes alluded to are 3 ft. wide, and by driving on the one we should cross-cut the other; we shall have a great length on each of them in the Gannell (about 600 fms.).—Bernard's Lode: The western end is looking better, a kindly lode again coming in. We have a great quantity of lime and sand carried, and the masons here yesterday, and day mixing it for the buildings; and we expect by the end of the week the engine and boilers will all be here.

CLARA UNITED.—Jas. Lester, Feb. 3: Llywernog: The water will be out this evening, when I shall measure and set the 40, east and west of shaft, to 12 men. I think it will be desirable to put down a larger lift of pumps from the 30 to the 40. We have a suitable lift on the mine, which could be substituted in a few days.—Dolwen: This level is now extended 10½ fms.; the boring-machine during the past week has been in effect, and the lode is started, and the men are now making fair wages under their bargains with Mr. Green.

CLEER'S HILL TIN.—S. Coeks, Feb. 3: We are progressing very favourably with clearing the adit level on No. 1 lode; we find the ancient tin streamers have taken away a great portion of the lode, but notwithstanding that, we find some arches of the lode standing very productive for tin, worth 2 cwt. of tin to the 100 sacks of tinstuff; we find the lode to be 6 ft. wide. As soon as the stamps are erected we shall be in a position to make useful returns, and pay good profits, as we have every advantage for working. I will advise you of any further discovery that may be made, which we expect daily as we get further into the adit level.

CROWAN CONSOLS.—J. Seymour, Feb. 2: The ground in Ward's engine-shaft is harder for breaking, consequently there is not that progress making as heretofore; we hope to get through this shortly. The tribute department remains much as last reported on. We shall have from 15 to 20 tons of moderately good copper ore to sample this day fortnight. There being a great deal of black ore, no one can judge the quality or the percentage, as we shall sample a great many tons of low quality ore on that day. The stope in the bottom of the 10 is down 7 fms. 2 ft. through a fine lode. As regards metallic indications, averaging from top to bottom, full 4½ ft. wide, that we shall have good courses of ore at the 30 is beyond doubt in my mind. I can now clearly see three distinct shoots of copper in the Dumping lode, coming down from above the adit level, between Ward's engine-shaft and the east end boundary of the sett, each shoot spreading out both in length and breadth as intersected at deeper levels, and I am satisfied that between the 20 and 40 we are to have a good paying mine. I find the blende gives on an average 1½ ton per fm. for fine copper, and the muddle also.

CROWLW.—J. Roach, Feb. 3: We are making fair progress in the deep adit level on the great cross-course, in which we still find pieces of ore, which from their texture I believe to be well charged with silver. From indications we expect we shall soon meet with the Brynall north lode. The 20, in Brynall, driving west towards this sett, is looking remarkably well.

CUDRA.—F. Luckey, E. Dunstan, Feb. 3: In the stope in the back of the 60 fms. level, west of Walker's shaft, the lode is 3 feet wide, and still worth 10, per fm. In the stope in the back of the 75 fathom level, west of the winze, the lode is without alteration since last reported; still worth 15, per fm. The lode in the stope in the bottom of this level is a little improved, and is now worth 18, per fm. The lode in the stope in the back of the 90 fathom level, east of the winze, is 5 feet wide, producing a little tin, but not sufficient to value. In the 90 and 105 fathom levels west we are driving the kilaas under the 60 fathom level; the lode is still poor.

CWMBAENE.—J. Kemp, Feb. 4: Saturday last being our setting-day, the following

bargains were set:—The 80 to drive south, at 5, per fm.; lode fully 3 ft. wide, producing 10 cwt. to the fathom, and likely to improve. The 40 north to drive by six men, at 21, 18s. per fm., stented 1 fm.; there has been no lode taken down here since last reported. A stope in back of the 40 south, by four men, at 21, per fm.; the lode is not 7 ft. good here at present, but I hope to get a good stope, from the appearance of the lode in the end of the shaft. A winze to sink in bottom of the 30, north of shaft, by six men, at 47, 10s. per fm.; lode 4 ft. wide, producing 8 cwt. of lead per fm. We have about 9 ft. more to sink to communicate with the 40. A stope in back of the 10, by four men, at 21, 5s. per fm.; lode 4 ft. wide, worth 10 cwt. per fm. The pitches, four in number, three at 7, per ton and one at 5, 10s. per ton, producing on an average 10 cwt. per fm. All our machinery is in good order, and our dressing operations progressing satisfactorily. I sampled 20 tons 1 cwt. of lead ore on Saturday last, at 12s. 10s. per ton.

CWM ERFIN.—Feb. 2: The lode in the 20, going east of the boundary, is 18 inches wide, and is yielding 10 cwt. to the fathom, and more water has been issuing from the end during the last few days than we have seen for some time past. The lode in the rise in the back of this level, 17 fathoms behind the present end, is 5 feet wide, and worth 1 ton of lead ore per fathom. The lode in the different stope over the back of the 20 varies from 2½ to 5 feet wide, and will yield, on an average, about 15 cwt. of lead ore per fathom. The lode in the 10, east of the boundary, is all the breadth of the end, containing clay-slate, blende, carbonate of lime, and lead ore, worth 25 cwt. of the latter per fathom. We have 20 men employed in the mine, and next week we shall begin sinking the shaft for a deeper level, of the success of which there can scarcely be a doubt.

DALE.—R. Nines, Feb. 4: The Pipe vein is yielding well. The tribute pitch on Johnson's lode still continues to improve. We commenced the dressing of the ore on Monday last, which we are getting on with as fast as we can.

DAREN.—W. Williams, Feb. 3: The lode in the stope under the 10, west of shaft, still of good quality, worth 25 cwt. of lead ore to the fathom, and next week we shall begin sinking the shaft for a deeper level, of the success of which there can scarcely be a doubt.

DRAKE WALLS.—Thos. Gregory, Feb. 3: The branches in the 102, east of Matth's shaft, are worth 7, per fathom. We are cross-cutting south in the Tye level, east of Matth's shaft, where we are intersecting some tiny branches east of the cross-course. The branches in the 60, west of Brenton's shaft, are producing good work for tin, and are very promising; we expect an improvement here, from the dip of the tin ground in the latter part of the level. The branches in the 50, west of Brenton's shaft, are worth 25, per fathom; this is going west all in new ground to surface. In the 40 west the branches are worth 10, per fathom. The branches in the adit level, west of Brenton's are worth 9, per fathom. There is no particular change to notice in any other part of the mine. We are progressing favourably with the drawing and dressing of tinstuff.

EAST BOTTALOCK.—Wm. H. Richards, Feb. 4: The ground at Reade's engine-shaft continues to be easy for progress, and of a most congenial character for the production of mineral; the lode in the deepest point is about 2 ft. wide, worth 8, per fathom for the length of shaft; we intend cross-cutting the side lode at the 20. The masons have commenced building smiths' shop, account-house, &c., I hope soon to have them complete. We shall push on the works with all possible speed.

EAST BOTTLE HILL.—J. Eddy, Feb. 4: The lode in the adit end east has about the same size and character as when last reported. The ground is easier for driving, so I hope to make more progress than we have of late. The copper branch is still keeping its regular course, producing a little copper and blende.

EAST CALADON.—J. Seccombe, Feb. 3: Counter Lode: The 60 east is worth 8, per fathom. The 70 east is worth 25, per fm.—New Lode: The 60 east is worth 8, per fathom. The 70 east is worth 10, per fm.

EAST CARN BREA.—T. Glanville, J. Scholier, Jan. 27: In the 60, driving west of the cross-cut, the lode is 4 ft. wide, producing 4 tons of copper ore per fm. In the western shaft, sinking below the 58, the lode is 18 in. wide, producing 1 ton of copper ore per fathom. In the 40, driving east of the new shaft, the lode is producing 1 ton of copper ore per fathom.—New Lode: In the 50, driving east of cross-cut, the lode is producing 1 ton of copper ore per fm. In the 60, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 70, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 80, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 90, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 100, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 110, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 120, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 130, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 140, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 150, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 160, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 170, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 180, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 190, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 200, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 210, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 220, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 230, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 240, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 250, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 260, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 270, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 280, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 290, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 300, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 310, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 320, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 330, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 340, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 350, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 360, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 370, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 380, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 390, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 400, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 410, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 420, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 430, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 440, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 450, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 460, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 470, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 480, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 490, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 500, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 510, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 520, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 530, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 540, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 550, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 560, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 570, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 580, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 590, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 600, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 610, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 620, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 630, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 640, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 650, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 660, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 670, driving west of the cross-cut, the lode is producing 1 ton of copper ore per fm. In the 680, driving west of the cross-cut, the lode is producing 1 ton of copper ore per

EAST WHEAL LOVELL. (Special Report, by Capt. Charles Thomas, of the Dolcoath Mines), Jan. 23: I have to-day inspected this mine, and the following is my report thereon:—Two levels are being worked, 7 fms. under the surface, and the level at 18 ft. in the shaft. The engine-shaft is sunk perpendicularly from the surface 17 fms., by sinking it 4 or 5 fms. deeper it would fall in with the level. Peter's shaft, 7 fms. west of the engine-shaft, is sunk perpendicularly from the surface 20 fms.; this shaft would also fall in with the level by being sunk about 6 fms. deeper. The 20 fm. level is driven west from the shaft nearly 10 fms.; the first 4 fms. of it is of little value; the next 4 fms. in rich tin, worth, I think, from 24s. to 40s. per fathom, average about 35s.; the last 2 fms. about a small cross-course, not of value. In the end the level, though small, contains some very good tin, indicating a greater improvement shortly. No ground has been stoped on this level, the back and bottom standing entire. North-love, reached by a cross-cut at the 17 fm. level from the engine-shaft, drained by a chain through that level sunk 9 fms., and at that depth explored west 7 fms., where a diagonal shaft, dipping west at an angle of 45°, is sunk 7 fms. deeper still. The back of this 26 fm. level is stoped 6 fms. in length, which yielded tin of the value of from 40s. to 60s. per fathom. Having given the above general description of the workings, I proceed to report on the present operations:—On the north-love, the diagonal shaft, below the 26 fm. level, is being formed into sinking headframe for the regular course of the level without dipping west. The level here is about 5 ft. wide, worth, I think, fully 50s. per fathom, or for the length of the shaft (12 ft.), 100s. per fathom in depth, working by 10 men. The 20 fm. level is driving west, by eight men, at 71. per fathom. The level in the end is 4½ ft. wide, worth, I think, about 60s. per fathom; the full width of the level not ascertained; no north wall reached near the end. The back of the 20 fm. level is stoping by four men, at 41. 5s. per fathom; 4 fms. behind the end, where the level is 3 ft. wide, worth about 41. per fathom. The bottom of the 20, 6 fms. behind the end, is stoping by two men. The level at this point is yielding some good tin, and will, doubtless, yield an increased quantity further west, on approaching the ends of the 20 fm. level. Hitherto the north-love, as reported above, has been drained by chains passing through the 17 cross-cut, and the shaft below the 26 has been fast dipping westward, which mode of working, though irregular for an established mine, is quite justifiable by way of searching for the best spot to sink an engine-shaft on this level. I fully agree with your agent that the best plan for present working is that of enlarging an old shaft, sunk 14 fms. by the engine-timber, and stoping the level from the 14 to the 26 fm. level, preparatory to sinking the engine-shaft continuously on the course of the level, just where the diagonal shaft is being enlarged. All this is being done, as reported above, and it is exceedingly fortunate that all the ground now stoping for this purpose is rich for tin. The eastern flat-roof shaft, 21 fms. east from the engine-shaft, is sunk near the north-love 8 fms. below the 14 fm. level, suspended for the purpose of making the main workings in the western rich ground. When the engine-shaft there is got into full course of working, a few months hence, the eastern ground will be explored, by driving east at the 26 fm. level, with good prospects of success, arising from the fact of the old miners having worked there more than any other, some tin of value having been found where the level was cut into at the bottom of this eastern shaft, and of tin of value going east from the present western workings. In concluding my report, I would make the following summary:—1. The mine, though worked rather extensively to the depth of 14 to 18 fms. from surface time out of mind, is still quite in its infancy for modern mining. 2. The success of working about 16 fms. deeper, and some 14 or 15 fms. in length at the greatest, has been very great, not only in the amount already realized by sales of tin, but also in the quantity of tin already explored for stoping at will. 3. There are three main points of importance to be worked for proving more extensively the value of this mining property: the sinking of the shaft in a course of tin, worth 100s. per fathom, for 12 ft. in length; the driving the 20 fm. level further west in whole ground, worth 60s. per fathom; and in a few months the driving the 26 level under the whole workings. All the conditions—the character of the granite, the form of the surface, and the fact of two levels being found so near together—are of a favourable kind for this district, which has often in some of the levels been changeable in value, even when profitably worked under judicious management. I have pleasure in reporting that no ground is being worked in this mine before it is properly drained and ventilated, and that the parts are working which can realise the best results to the adventurers. The steam-engine at work is of power enough to sink to a great depth. The quantity of water is so small that it is of comparatively little importance whether it is pumped direct or by flat-roads. I am also pleased to have to report that the mine is showing indications of more permanency, and more tin is now being explored than at any time in the mine on Dec. 12 last.

EAST WHEAL LOVELL.—J. Burges, Feb. 4: The shaft is sinking below the 26, by ten men; the level quite 8 ft. wide, worth 100s. per fathom. The 20 end, on the north-love, fully maintains its value, worth 70s. per fathom; driving by eight men. The stopes are worked by six men, and worth on an average 50s. per fathom. The south-love is as last reported. On Friday we shall cut a new cross-cut to drive south to intersect another level. **EAST WHEAL RUSSELL.**—J. Goldworthy, Jan. 30: The level in the 120 east has improved, and produces ¼ ton of copper ore, or worth 31. per fathom; the level is looking more promising. No other change. J. Goldworthy, Feb. 3: Telegram: In the 120 the level is worth 50s. per fathom.

—John Goldworthy, Feb. 3: Homersham's Shaft: The ground in the 130 fm. level cross-cut is favourable, and good progress is being made; by present appearance the south-love is close ahead. In the 120, west of Maynard's cross-cut, the part of the level being carried is 4 ft. wide, composed of capel, quartz, iron, and spotted with black oxide of copper ore—a promising level. In the 120, west of Vigar's cross-cut, on the main part of the level, the level is 3 ft. wide, producing a little copper ore, but not sufficient of the latter to value. In the 120, east of Vigar's cross-cut, the level is 4½ ft. wide, composed of capel, peach, muddle, and iron, worth 1 ton, or 61. per fathom. The ground in Hooper's cross-cut, driving south from the top of Hooper's rise, is favourable for progress. In the 45 east the level is 3 ft. wide, composed of peach, quartz, muddle, &c., unproductive. The level in Harvey's rise in back of the 45, so far as cut into (5 ft.) is composed of capel, quartz, peach, muddle, &c., with spots of copper ore. In the 88 fm. level, west of Hitchin's engine-shaft, the ground in Williams's cross-cut driving north has become harder, which renders the progress slow at present.

—J. Richardson, Feb. 4: Homersham's Shaft: In the 130 cross-cut north the south part of the level is intersected and cut through. It is 18 inches wide, composed of quartz, muddle, and iron. The drive will now be turned east on the course thereof, and no time will be lost in getting east towards the ore ground. In the 120, west of Maynard's cross-cut, the level is 4 ft. wide, and yields a little black oxide of copper. In the 120 east, west of Vigar's cross-cut, on the main part of the level, the level is 3 ft. wide, composed of quartz, muddle, and stones of rich ore. In the 120 east, west of Vigar's cross-cut, the level is large, 4½ ft. wide, and maintains its kindly appearance—quartz, peach, iron, muddle, and iron, worth 1 ton, or 61. per fathom. In Hooper's cross-cut south, from the top of Hooper's rise in the back of the 88, west of Molard's cross-cut, on the north part of the level, the ground is favourable for progress. In the 45 east the level is 3 ft. wide, composed of muddle, peach, and quartz. In Harvey's rise, in back of the 45 east, the level so far as cut into (5 ft.) is composed of muddle, quartz, peach, and a small proportion of copper ore. In Williams's cross-cut north, at the 88 west, progress is at present slow, the ground having become hard.

FURZE HILL, WOODS.—J. Gregory, Jan. 30: In the 13, east cross-cut, No. 1 north-love is 4 ft. wide, worth 100s. per fathom, with a very promising appearance. The level in the 40, west of cross-cut, is 3½ ft. wide, composed of soft quartz, elvan, and tin ore, worth 71. per fathom; judging from present appearance, this end will improve as we approach the western cross-cut. We have not yet taken down the level in the rise in the back of the 40, where cut into it produces good saving work for the stamps. The level in the winze sinking below the 20 is from 5 to 6 ft. wide, a portion of which we are carrying, and producing saving work for the stamps; the north, or main part of the level will be taken down in a few days, so as to prove its value. Our prospects at the 40 continue to improve. There are small branches of good tin work in the bottom of the engine-shaft, intermixed with elvan and prlan.

GARREG.—W. Sandoe, Feb. 3: I have just come up from underground here, and am pleased to find the level looking better in the winze sinking below the 20; the level is 3 ft. wide, carrying a solid rib of ore, in places 6 in. wide, and from its kindly appearance, expect it will improve. There is no change in any other point since last week. **GAWTON.**—R. Bay, Jan. 30: The sinking of the engine-shaft is progressing as fast as the nature of the work will admit; the ground is moderately easy, and of good description for the production of mineral. The level in Nos. 1 and 2 stopes, in back of the 36 west, continues to look well, and yielding the usual quantity of ore. We sampled on Wednesday last (computed) 72 tons of ore, being the produce of present month.

GREAT BRIGAN.—J. Tredinnick, Jan. 30: Highburrow shaft is in full course of sinking, and is to be carried 12 ft. long; the price for sinking is 20s. per fm.; the level in the shaft is split into branches, and disordered by a large floor of spar, which crossed the shaft at the depth. The branches produce a little copper ore, and are of value. It is my opinion these branches will come together in sinking, and form the level regular and more productive for copper ore. I shall put a pair of men to cut the plat larger, and then drive the 45 west on the course of the level; the level in this end is 2 ft. wide, yielding a little ore. The water has been very high in the addit this week. We were obliged to stop the engine and put in timber and turf by the side of Highburrow shaft, to prevent its running over the men.

GREAT NORTH DOWNS.—J. W. Crane, Jan. 30: The men are making fair progress in sinking Vigar's engine-shaft, in the bottom of the level in the 4 ft. wide, kindly in appearance, and yielding saving work for copper ore. The 57, driving from engine-shaft, is communicated to No. 2 winze. The level in the 57, driving east of Jenkins's shaft, is 3 ft. wide, worth 81. per fathom. The ground in the 57 cross-cut, south from engine-shaft, is favourable for driving. We intend to commence sinking River shaft below the 60 fm. level next week. The tinstuff sold on Thursday last realised 184s. 10s. 6d. The machinery is in good working order.

GREAT RETALLACK.—H. Reynolds, Feb. 2: In the addit end we have branches of spar, with blende and muddle, and we expect to cut a little tin. **GREAT SOUTH TOLGUS.**—J. Daw, Feb. 3: In the 166, east of Lyle's shaft, the level is 1 ft. wide, composed of spar, jack, and stones of copper ore. In the 154 west the level is worth 30s. per fm. for tin. In the 154 east the level is 1 ft. wide, unproductive. In the 140 east the level is 1½ ft. wide, producing 3 tons of copper ore per fm. In the 125 west the level is 1 ft. wide, producing 1 ton of ore per fm.—North-love: In the 90 east the level is 1 ft. wide, worth 51. per fm. for copper ore. The level in the winze sinking below this level is 2½ ft. wide, producing 3 tons of ore per fm.

GREAT WHEAL BUSY.—John Edwards, J. Petherick, W. Release, Jan. 30: At Harvey's engine-shaft, sinking below the 130, the level is 2½ ft. wide, and worth for tin and copper ore from 20s. to 25s. per fm. The level at Offord's shaft, sinking below the 130, is 3½ ft. wide, worth full 25s. per fm. for tin and copper ore. The level in the 130, driving east of said shaft, is 5 ft. wide, and worth for tin and copper ore 30s. per fm. The level in No. 1 stopes in back of the 130, east of Harvey's, is 4 ft. wide, and worth for copper ore 30s. per fm. The level in No. 2 stopes, east of ditto, is 3 ft. wide, and worth about 15s. per fm. for copper and tin. The level in No. 1 stopes in back of the 130, east of Offord's shaft, is 3½ ft. wide, and worth 20s. per fm. In No. 2 stopes, east of ditto, the level is 4½ ft. wide, and worth for copper and tin 35s. per fm. The level in No. 1 winze, sinking below the 120, east of Offord's, is 4½ ft. wide, and worth 40s. per fm. for copper and tin. The 110 fm. level endmen are engaged in fixing skip-rod from the 100 to the 110 at Matthews's shaft. The level in the 70, east of said shaft, is 6 ft. wide, producing stamping work for tin.

GRIT AND STAPLEY.—Jan. 30: All the works connected with these mines are going on regularly. The 166 fm. level cross-cut is now extended north from the East Grit steam-engine shaft towards the south-love 3 fms. 2 ft.; the cross-cut as present is in very hard ground, containing some small branches of spar; it looks as if we are near the south part of the level; we hope that about a week or nine days we will bring us into the ore-bearing part of the level, which stands pretty much to the north in the levels above; as soon as the level is cut and drained from water to the 106 fm. level, we shall commence at once to sink a winze or two below the 90 fm. level, so as to lay open that piece of ground between the 90 and 106 fm. levels, for taking away as soon as possible. The 90 fm. level, west from East Grit engine-shaft, is in a level about 1 ft. wide, principally composed of spar, and producing stones of lead ore, but not sufficient to value; the level at present is in a hard ground of ground, which makes our progress rather slow at present for driving. The 90 fm. level, going north on the cross-course, is in a level about 6 ft. wide, composed of grit and spar, and showing spots of blende and lead ore; the ground is rather stiff at present for driving. There has been nothing done in the 70 fm. level, south on the cross-course, since last reported. We have there a pair of men employed at present in cutting a good plat at the 106 fm. level; we want that plat cut to a good size, so that we may have no time when the level is cut, in sending away the stuff to surface; as soon as they have completed that job we shall resume the driving of the 70 fm. level, south on the cross-course, again. The Dingle shaft is sunk to

the required depth for the 60 fm. level; we have made good progress in sinking this shaft from the 50 to the 60, which has occupied about nine weeks. We have commenced the cross-cut at the bottom of the shaft, towards the 40 fm. level, and we calculate to have about 3 fms. drive to reach the level; this we hope to accomplish in about three weeks' time. The 50 fm. level, south from the Dingle shaft, on the Squill-very level, is in a level about 3 ft. wide, composed of clay-slate, spar, and producing good stones of lead ore; this is the most promising level that we have in the mine at present, the level looks kindly, and is going south all in virgin ground, where we hope to find some good deposits of ore; we have six men in this level. The level in the 80 fm. level, east from the West Grit engine-shaft, on the Ridden level, is about 6 ft. wide, composed of clay-slate and spots of blende; ground hard for driving. The level in the Stapley deep addit level is about 4 ft. wide, principally composed of spar, and letting out a little more water than usual.

GRYLLS WHEAL FLORENCE. (Marazion), E. Rogers, Feb. 3: Standard Level: The deep addit level, east of the north winze, which is 40 fms. from surface, is communicated to Wheal Grylls; the level in the back is nearly all taken away from shaft to the east boundary, but in the bottom of this level, for about 15 fms. in length, the level is worth 18s. per fm., and when this ground is laid open can be stoped at 41. per fm.; in this level we have a cross-cut to drive north, 40 per fm. at 41. per fm.; we expect in a short time to intersect Fisher's level. In the 30 and 19 fm. levels the level east of the shaft is nearly all taken away, and in those levels west the level is in a disordered state, and unproductive.—Hoskings's Level: In the deep addit end, east of the north winze-shaft, the level is 3 ft. wide, composed of spar, kilias, muddle, and stones of copper ore; this level is gone through about 6 or 7 fms. of profitable ground, but the backs at the present time are not so rich as they have been. The level at this point appears to have passed over the top part of a bunch of copper ore. With regard to future prospects, I should say the engine-shaft must be sunk, levels deep, and a ground opened by winzes under addit, before any profits can be made; the level left standing above the addit level is mostly worked away, but a certain part of it will be taken away by tributaries so soon as you get the stamps in working order, as the returning charges will not be so high then as they are now, by selling it in the stone. In viewing the favourable character of the ground, and the congenial appearance of the different levels in and adjoining this property, I have no doubt but a small outlay will place this mine in the dividend list.

GWYNID PARK.—W. Smyth, Feb. 4: The stopes in the back of the addit level still yield 6 cwt. of lead per fathom. The level in the deep addit, or shallow level, is 3 feet wide, producing good stones of lead ore. In the Gwynid deep addit, driving east on the east and west level, the level is 8 to 10 inches wide, composed of spar, muddle, blende, and lead ore, looking very kindly, and letting out water. The end on Gossan level north is looking very kindly, with faces of lead ore. The dressing is going on as usual.

HARWOOD.—J. Race, Jan. 29: We are at present engaged raising up into the limestone in the new level, and I hope to reach it next week, if all goes well. With regard to future prospects, I should say the engine-shaft must be sunk, levels deep, and a ground opened by winzes under addit, before any profits can be made; the level left standing above the addit level is mostly worked away, but a certain part of it will be taken away by tributaries so soon as you get the stamps in working order, as the returning charges will not be so high then as they are now, by selling it in the stone. In viewing the favourable character of the ground, and the congenial appearance of the different levels in and adjoining this property, I have no doubt but a small outlay will place this mine in the dividend list.

HAYAN.—M. Francis, Jan. 28: I was through the works here on Monday, under over ground, and commenced the plans, sections, and levelings, but I cannot report thoroughly before they are finished. The ore ground is open from 15 to 20 fathoms, but it is not so deep as the level of the ore, and the ore formation has been yet seen in the end stopes. The ore yields 1 ton to the fathom, and in the middle stopes 2 tons; and from 20 to 25 tons monthly may be fairly taken away from the ground opened, without trenching upon the principles of good mining. About 100 tons, from the look of the ground, has been broken, and lies in and out of the mine for dressing. There is one circumstance connected with this course of ore that will admit of its being worked away rapidly if necessary—it is that the water finds its way from it apparently to the deep level, consequently no pumping-power is required, nor will be for some time to come. The crushing machinery is being erected as fast as the weather will permit; the crushing-house is up to the height of the sides, and the gable ends are building; the rollers, wheel, and most of the machinery, except the round riddle, are in their places, and the railway is laid to within 70 fms. of the mill. It appears to me that there is considerable room for economy in the underground and surface work, but I can yet hardly make the comparison to establish what the prices ought to be in these inhospitable positions, where there are few dwellings, and nothing but morasses for miles in every direction.

HAWKMOOR.—T. Richards, Feb. 2: The drive of the addit level west on No. 3 level is suspended, and the men placed to assist at the shaft for the more speedy hoisting to the rise coming up from below; as soon as this is effected good ventilation will be obtained, and a full force of men employed in prosecuting the drive on No. 3 level towards the large cross-course ahead, where there is every reason to hope for and expect a very great improvement in the level, from which 14 tons of tin ore have been already sold. The price of copper ore sold, and realised 28 tons, weighed 28 tons 14 cwt., was purchased by four companies, and realised 41. 10s. per ton.

HINGTON DOWN CONSOLS.—T. Richards, Feb. 3: In the 110, west of Morris's engine-shaft, the level maintains its size and character, being a splendid course of ore, worth 75s. per fathom. The rise and stopes in the back of this level is worth 49s. per fathom. The level in the 100 west is producing rich stones of ore. The level in the 85 is worth 20s. per fathom. The level in the rise in the back of this level is worth 30s. per fathom. No other alteration.

LADY BERTHA.—Capt. Harpur and Metherell, Feb. 4: The level in the 53 fathom level is about 1 foot wide, composed of peach, muddle, quartz, and black and yellow copper ore; a very kindly level, worth quite 51. per fm. This, if it should continue, is of no small importance, as the shoot of ore appears to be dipping east towards the new eastern shaft. The level in the 53 west is from 3 to 4 feet wide, composed of quartz, muddle, peach, and ore, worth of the latter 20s. per fathom. We have just commenced a rise above the back of this level, to communicate with the winze below the bottom of the 10 west, where the level, when last reported, it was worth 15s. per fathom, but is now suspended, in consequence of water. In the 10 east the level is about 2 feet wide, composed of peach, quartz, muddle, and good stones of ore. In the 30 east we have no particular change to mention, the level being still split into branches. The tribute department continues to yield much the same as usual. In the new eastern shaft, sinking below the 30 fathom level, the ground is moderately favourable for progress.

LAVINET.—J. Tregay, Feb. 2: The house will be ready for the engine by the end of this week; we have, therefore, made arrangements for commencing to fix the engine on Monday next. Vance's level is still looking well, and has this week produced better tinstuff than we have seen here before.

LLANFAIR GREEN AND BLUE SLATE QUARRIES.—The following report on the progress of these quarries has been received:—No. 1 level has been driven 74 yards into the hill, and for the last 25 yards the driving has been in the blue vein, which will be passed through in about 15 yards additional driving. When thoroughly intersected a level will be driven at right angles to the present on the back of the vein under the clay slant towards Gorseghin Quarry, and chambers opened out, and slate quarries commenced. The vein towards the level is of excellent colour and quality, and splits well. No. 2 level is driven above No. 1, and is 74 or 75 yards long; this level has passed through the slate vein being nearer the top of the hill. An opening has been made from this level to the surface, and a rise will also be commenced from No. 1 to No. 2, as soon as the clay slant is reached, which will facilitate the working up to the surface, and thoroughly ventilate the quarry. No. 3 level has been driven 55 yards, at a distance of 100 yards north of Nos. 1 and 2 levels, and has passed through the blue vein, which is 1 yard wide. From this level a level is now being driven upwards of 60 yards thick. In the meantime a trial shaft is being sunk into the centre of that vein. The rock proves large, and the back and foot-joints unusually good, and although the shaft is at present only 5 or 6 yards deep from the crest of the hill, slates of excellent colour and quality have already been made from it. Several cargoes of iron and sleepers for the Welsh Coast Railway have lately been landed at the wharf at Pen-y-sarn, only half a mile distant from the quarry, where the slates can be shipped at all times, and the railway, which will pass between the wharf and the quarry, will facilitate transport to and from the market.

LONG RAKE.—F. Evans, Feb. 3: The shaftmen have contracted for 61. to put skip-rod from the 70 to the 80, bring down ladders, put in penthouse, and complete everything for driving out the bottom levels; a few stems more will complete this, and the 80 east and west started. The 70 east is worth 1 ton per fm. The 60 west is in a very promising level, with a little lead coming in. The 60 east is driving in a large ore level, and opening good tribute ground. The pitches are turning out fair quantities of ore, and our sampling, on Tuesday next, will be at least 25 tons.

MINER'S UNION.—W. T. Harris, Feb. 4: The level in the 80 yard level north continues same in character as last reported, and producing good stones of lead occasionally.—William's Shaft: The 40 yard level south is unproductive, and is suspended for the present, and the men placed to sink a winze in the bottom of the level close to the end. The branch going east out of this level produces a little lead, and very promising. The pitches are same as last reported.

MORRIS SILVER-LEAD. (Llanidloes).—James Roach, Feb. 3: We have driven on No. 1 level, north of cross-cut, where 14 magnificent stones of lead ore, under a back of 5 fathoms from surface, and being satisfied with its lead-bearing qualities I sunk a winze under the level, where I met with lead ore that exceeded my expectations; this winze is improving fast, but for the moment, from the increase of water, we must cease sinking. We have driven west on the great No. 2 level, and have found an extraordinary deposit of carbonate of barytes, producing 14 or 15 tons per fm., and also excellent stones of lead ore; it is my opinion that a large deposit of lead is under this barytes, and we have now commenced to prove this by driving a level 10 fathoms deeper to intersect the level by cross-cut, in two or three weeks, and then drive on its course, which will come under the workings already to, and no doubt, open up a permanent and profitable mine. In a day or two I will send you samples of the ore, &c. I have sold 90s. of lead of barytes, and have stock on hand, which will give us a profit of about 200s. up to the present time.

NANTEOS.—R. Williams, Feb. 3: In the south cross-cut we have driven 22 ft., but for the last 3 or 4 ft. we have had no sign of level; I have, therefore, put the men to drive west on the branches we passed through some 13 ft. behind the end; those branches they produced some good lead ore, and presented favourable indications, but only having cut across them in opinion as to the result of further opening on them can scarcely be formed, but in course of a few days I will report thereon. The end, driving east, has in it a very strong level, still as at the date of my last report composed of blende, lead, silicite, and carbonate of iron, &c.

NANTY.—Feb. 1: Saturday last being setting-day the following bargains were set:—The roadway level to drive north of boundary by six men, at 41. per fm.; level 4 feet wide, with a kindly appearance, spotted with lead ore. The level in the rise over this level, 110 fm. north of boundary, is about 5 ft. wide, yielding good saving work, worth about 4 fms.; set to four men, at 41. per fm. The level in the 80 yard level north of boundary, is set to four men, at 21. per fm. The stopes over ditto, 80 fms. north

of boundary, is set to four men, 21. per fm. The stopes over this level, 40 fathoms north of boundary, is set to six men, at 21. per fm. These three stopes are yielding on an average 14 cwt. of lead ore per fm. The level in the 10, north of boundary, is 4 feet wide, unproductive at present; set to four men, at 41. per fm. The stopes over this level, 80 fms. north of boundary, is set to four men, at 21. 5s. per fm. The stopes over ditto, 30 fms. north of boundary, is set to six men, at 21. 5s. per fm. The stopes over this level, three in number, are yielding on an average 12 cwt. of ore per fm. The level in the deep addit level, going north of boundary, has been poor and rather disordered for several fathoms in driving, and at point about 10 fms. from the present end a small joint was noticed going off into the western side of the level, which we have since followed for about 4 fms., and find this to be the most important point of the level; it is now 4 feet wide, showing strong spots of lead ore, and looking very promising; set to six men, at 51. per fathom. The stopes over this level, 70 fms. north of boundary, is set to six men, at 21. per fm.; level here 6 ft. wide, yielding 18 cwt. of lead ore per fm. The level in the rise over same level, 50 fms. from its entrance, is 2 ft. wide, producing a little ore at times; set to four men, at 41. per fm. We are still pushing on with the roadway level, for the new line of rods, &c.; set to six men, at 61. per fm., the end now being in whole ground. The dressing and all other surface work is now going on regularly, and we sampled 100 tons of good quality ore on Monday last.

NETHER HEARTH.—W. Vipond, Jan. 29: We have got some of the best samples of ore from the east and west vein since yesterday that we have yet seen. The ore is in the highest part of the limestone, which we have in the level; it continues to go on and if it should set down to the bottom, I have no doubt but it would work to profit. I intend to then open a bargain on Monday.

NEW CROW HILL.—W. Trevellick, Feb. 2: In the 55 east we have a well-defined level, about 3 ft. wide, of almost solid muddle, with a little lead interspersed; this level is strong and masterly, and I think a great improvement must shortly take place, especially as we have water now from the end, which I never saw before in this level. The stopes in the back of the 55 are looking better than when last reported on. Everything else underground is without change. We are drawing the muddle to quays very fast.

NEW ROSEWARNE.—E. George, Wm. Mitchell, Feb. 4: Bickford's shaft is down 4 fms. below the 47; the level is 4 ft. wide, worth for tin and copper 151. per fathom. The level in the 67, east of Bickford's, has improved since our last report, now worth 61. per fm. for tin, and looks kindly for further improvement. The level in the 67 west is small at present, worth 61. per fm. for tin and copper. We have holed the winze sinking under the 58, west of Bickford's, and have set to the men to stopes east and west of the same, in ground worth about 15s. per fm. Stoping at 31. 10s. per fm. In the 58 west we have not taken down any level since our last report, but shall do so next week. The level in the 46, west of Bickford's, is at present disordered by a cross branch. In the 34, west of Bickford's shaft, we are driving a cross-cut south to the south part of the level, which we expect to reach in 4 or 5 fms. driving. In the 74, west of Phillips's shaft, there is no alteration to speak of; the level is large, but poor. This end is now about 20 fms. east of the course of muddle in the 58.

NEW TRELEIGH.—S. Michell, Feb. 3: The level in the 90, east of Carr's engine-shaft, is unproductive; we have suspended the operations here for the time, and have put the men to drive west of the shaft; the level contains a little ore, and under the present circumstances the western ground is our main object. There is no level driven west below the 70, but a few feet only. The men in the 70, west of cross-course, are engaged stripping down a piece of ground against the level, which will be completed by the middle of next week, when we shall commence stoping the back. The 60 end, going towards the cross-course, is looking very kindly; the level will yield sufficient ore to defray the expense of driving, which is 51. per fathom. The stopes in the 70, east of the shaft, is poor at the present time. The stopes in back of the 60, west of Symons's shaft, is worth 71. per fm. The stopes in the 63, east of Carr's engine-shaft, is worth 81. per fm. The level in the 80, west of Good Fortune shaft, is 3 ft. wide, with spots of ore, and of a better appearance. There is nothing of importance to report on the 70, east of this level; this level will be cleared out to the end, east of Good Fortune shaft, in the course of two or three days more. Our tribute pitches are much the same as for some time past, and are getting about the ore as fast as we can for sampling.

NEW WHEAL MARTHA.—H. Rickard, Feb. 4: The engine-shaft is now down 4 fathoms below the 74; the trouble by the side of the level is of a favourable description, but the water makes it very troublesome for sinking. We expect to hole the rise against the winze at the 74 east every hour, as we can hear each other speak very plainly; this will afford good ventilation at this level. The level in the 74 west is divided by a horse of kilias, the north part being 2½ feet wide, producing stones of ore, with a very kindly appearance. The level in the 64 west is not quite so good as last week; this, I hope, is only temporary. The stopes in the bottom of the 52 fathom level, west of No. 1 winze, is greatly fallen off in value for copper ore, but yielding large quantities of coppery muddle. The stopes east of this winze are worth 8 tons of ore per fm. The stopes in the back of the 52 fathom level east are worth for copper ore 10s. per fm. The tribute department is the same as for some time past. All the surface operations are going on satisfactorily in relation to the dressing department.

NORTH BASSET.—T. Glynville, G. Davey, Feb. 3: In Grace's shaft the level is 2 ft. wide, producing a little tin. In the 112, west of Grace's shaft, the level is 3 ft. wide, worth 51. per fm. for tin. In the winze under the 102 the level is 2 ft. wide, worth 41. per fm. for tin. In the 102, west of Grace's shaft, the level is 3 ft. wide, worth 91. per fm. for tin. In the 102, west of the cross-cut, the south-love is 3 ft. wide, worth 81. per fm. for tin ore. In the 92, west of Grace's shaft, the level is 18 in. wide, producing a small quantity of tin ore. In the rise in the back of the 42 the level is 15 in. wide, composed of muddle, spar, and stones of copper and tin ore.

NORTH BUTLER.—R. Pryor, H. Harvey, Jan. 29: We have set the following bargains to-day:—The 100 to drive east of engine-shaft, by six men, at 91. 10s. per fm.; we are at this point desailing the level, in consequence of its letting out too much water, which makes it spare for driving; we shall cut through the level again in about three weeks' time, when its size and character shall be sent on. The 100 cross-cut to drive south of this shaft, by six men, at 101. per fm.; this end is still letting out a quantity of water, and is impregnated all over with spots of copper ore, muddle, blende, and in a beautiful channel of ground. The 78 to drive east of shaft, by four men, at 71. 10s. per fm., in a level 2 ft. wide, producing good stones of copper ore. The 80 to drive west of cross-cut, on King's north-love, by four men, at 71. 10s. per fathom; level 18 in. wide, composed of muddle, peach, and spar, with rich copper ore intermixed.

NORTH CROFTY.—Wm. Thomas, Jan. 30: In the 183, both east and west of engine-shaft, the level is large, composed of spar, peach, muddle, and flookan. In the 174 east the level maintains its size and productivity, and is worth 40s. per fm., but spare for driving. The level in the rise over the 170 is worth 251. per fm. We have decided to commence to sink a winze under the 160 fm. level, 5 fathoms in advance of the present 170 end; level worth 121. per fathom, with an expectation of a speedy improvement. In the 160 end the level is regular and well defined, being 4 ft. wide, worth 351. per fm. We shall soon resume the sinking of the winze under the 150; now down 3 ft. 7 fms. in advance of the 160 end. The stopes in back of the 150 east are worth from 15s. to 20s. per fm. In the 150, west of Fetherick's shaft, on the south part, the level is worth 121. per fm. The stopes above are worth 50s. per fm.

NORTH DEVON.—J. Blamey, Jan. 20: The addit level is producing ore, and the winze sinking to the 10 will produce from ½ to ¾ of a ton per fathom. The 10 is producing a little ore, but not to value. The stopes between the 10 and 20 is producing on the average 1½ ton per fathom, and it will be quite necessary for us to have a crusher erected as soon as possible. When the winze now sinking is completed, we shall have more than 300 fms. of ore ground laid open, which we can take away at a good profit. The back of the 10 has ore in sight for 15 fms. in length, and as the shaft is sinking, and the level is valuable, we shall consequently soon have a large quantity of ore lying at surface. The mine has wonderfully improved during the last six months. The 30 is easy for driving, and I am of opinion we shall soon get into good ore ground here also, which will greatly add to the value of the mine.

NORTH DOWNS.—Francis Pryor, John Grenfell, Feb. 3: We cannot report any change in the level, but have decided on driving a short cross-cut north and west of the cross-course, with a view of seeing if the level continues good to the north of the shaft. Should this be the case, and if it is not heated by fire, it will enable us to carry the whole. This will be proved by the early part of next week.

NORTH LAXEY.—R. Rowe, Feb. 2: We are now putting in the rods in the new shaft, and I hope to inform you in my next report near to the probable time we shall resume sinking; it will be sooner than first reckoned on. The 50 fm. level end and stopes are without change since last reported.

NORTH MINERA.—Jas. Dunkin, Feb. 3: The ground in the eastern shaft, sinking under the 35, is getting a little harder, but still continues quite as good for sinking, and I think we shall soon be in the limestone. In the 25, east of the level, north of the level, the level still continues large, very kindly in appearance, and producing good stones of lead ore. The stopes in the 15, west of said shaft, will produce 1 ton of lead ore per fathom.

NORTH WHEAL ROBERT.—J. Richards, Feb. 4: At Elliott's cross-cut north, at the 52 fathom level west, the ground is hard and slow for progress. In the 43 fm. level, east of Heard's rise, on No. 1 south-love, the level is 1 foot wide, and yields good stones of ore occasionally. The level in

bottom of the 113, east of the same shaft, on Allen's branch, are worth on an average 15s. per ton. In the 103, east of the same shaft, Allen's branch is disordered and small. The stope in back of the same level, on Allen's branch, are worth on an average 15s. per ton. In the 103, east of the same shaft, Allen's branch is disordered and small. The stope in back of the same level, on Allen's branch, are worth on an average 15s. per ton.

WHEAL UNION.—T. Glanville, Feb. 3: There is nothing new in our tubwork operations to report on. In the flat-rod shaft we are cutting down ground for bearers and cistern, and preparing to fix plunger-lift.

WHEAL UNITY CONSOLS.—W. H. Reynolds, Feb. 2: At the flat-rod shaft, sinking below the 50, the lode is 18 in. wide, and of a very kindly character for copper. The lode in the 50 west is looking much better, with good copper ore disseminated throughout, and we expect an improvement. We have cut the lode in the 40, at the western shaft, and it is one of the most promising lodes I have seen for some time; it is 18 in. wide, and made up of spar, with prisms, blende, and copper ore. We are driving west, and are near the great cross-course against which East Treasury lodes were so good.

WHEAL UNY.—S. Coade, Jan. 30: Tin Lode: We have been engaged in fixing the new pitwork at the 80 this week, and the bottom levels are all under water; consequently, we could not set them yesterday, but expect to resume driving them again sometime next week; it will not interfere with the returns, as we have supplied the stamps from Gooding's. The 80 fm. level rise, under Gooding's shaft, is progressing favourably by six men, at 6s. per fm. The 60 fm. level rise, under Gooding's shaft, we expect to hole in a day or two, when we shall cut ground, and bring down the skip-road at once.—Copper Lode: The lode in the 68, west of No. 3 shaft, is worth 12s. per fm.; driving by four men, at 4s. 10s. per fm. The lode in the 68, east of shaft, is disordered at present, but we anticipate an improvement soon; driving by four men, at 5s. 6s. per fm. The 58, west of the new shaft, is driving by four men, at 5s. per fm. The new engine-shaft was not set yesterday, but shall do so on Monday to sink below the 58.

WHEAL VYAN.—W. Teague, Feb. 2: The 55 fm. level end, driving west of engine-shaft, is nearing Ross's shaft, and when communication is effected, which will be shortly, will undoubtedly unwater a long run of tin ground gone down in the level above. This is an important feature, and gives us satisfactory reasons to say, when it is accomplished, we shall be enabled to break and send up a larger quantity of tinstuff. The 40 fm. level end, west of engine-shaft, is yielding fair stamping work. The stope in the back of this level, west of engine-shaft, is producing good stamping work. From the present appearance of the tributary ground, it gives us evidence to believe that it will soon improve. The cross-cut at the 40 fathom level is progressing satisfactorily. All our machinery is working well.

YARNER.—R. Barkell, Feb. 3: North Lode: We are pushing down the shaft below the 30 as fast as possible; the lode therein maintains its size, but it does not contain as much copper as when last reported on. The stope in the back of the 20 is worth 2 tons per fathom.—South Lode: The 50 west is still passing through branches of ore and spar. There is no change in the ground. In the 50 east there are patches of killas mixed up with the lode, which is disordered at the present, and it is not so well defined. The pitch in the back of the 30, east of shaft, is still looking well—worth 2½ tons per fathom. The other two pitches are worth 2 tons per fathom each. All the machinery is working well.

DRYING PEAT.—Mr. C. E. Newcomen, of Ovington-square, Brompton, has invented an improved means of drying peat. He provides an air-tight chamber, into which the peat to be dried is wheeled; heat is applied to the outside of the chamber, and a vacuum, or nearly a vacuum, is created by means of a pump or other suitable contrivance. The combined evaporative and exhaustive actions greatly accelerate the drying of the peat.

MINERS' SAFETY-LAMPS.—An invention has been provisionally specified by Mr. Joseph Brooke, of Bar-street, Laister Dyke, which relates to certain improvements in safety-lamps, whereby they are rendered safer, and impart a better light than has hitherto been obtained from lamps of this description; also adapted to the burning of hydrocarbon mineral oils. The special improvement in the lamp consists in dispensing with the fine wire gauze round the flame. The cold air is admitted through adjustable air-spaces in a circular air-chamber, screwing the oil-pipe into the chamber. Inside the said air-chamber are placed circular wire gauze plates, or cylinders of gauze. Next above the air-chamber is the bottom flange-plate, which screws to the air-chamber. Through the centre of the flange-plate projects the wick-tube and burner from the oil-pan below. On the top side of the bottom flange-plate, on its external circumference, are fixed four (more or less) equidistant metal pillars, which stand perpendicular to the flange-plate, and reach to the top of the lamp for connecting the upper with the lower part of the lamp; upon this bottom flange-plate rests the glass chimney and cylinder, the ends whereof are connected to the flange-plates by lock-bolts. The top flange-plate admits of the metal pillars passing through it to where the adjustable screw rests of the pillars are placed for supporting the top flange-plate in position. The top flange-plate also rests on the top of the glass chimney and cylinder, the top whereof is connected by a flange with the top flange-plate, and the said flanges make the safety connection between the glass chimney, glass cylinder, and top and bottom flange-plates. The upper part of the glass chimney projects through the top of the flange-plates into gauze caps. The upper part of the glass chimney projecting above the top flange-plate, and the lower part of the glass chimney projecting below the bottom flange-plate, the object of which is to protect the glass chimney from cold currents of air, and to increase the draught. In lieu of the two heretofore described modes of ventilating the lamp below the flame, a third mode can be applied—namely, by making air-spaces in the top and bottom flange-plates perpendicular to the annular air-space between the aforesaid glass chimney and cylinder, by which means the cold air will enter the lower part of the gauze caps, pass through the top flange-plate down the annular air-space between the glasses, where it will become heated, and pass through the bottom flange-plate into the air-chamber, and so to the flame of the lamp, the gauze plates or cylinder heretofore described not being required in this latter plan. The gauze caps have flanges through which the metal pillars pass; said flanges rest upon the top flange-plate. The ring-plate is placed over the gauze caps, from the under side of which descend four hollow cylindrical legs, a little longer than the gauze caps, which legs fit on to the metal pillars, and rest upon the cap-flanges, pressing them down upon the top flange-plates. The upper side of the ring-plate has a circular slide piece, fixed to it by slide rivets in grooves, which slide has four angular projecting locking-pieces, which lock into suitable lock-holes in the metal pillars aforesaid near their tops, thus fixing the ring-plate in position. The ring-plate has the ring fixed in its centre for carrying the lamp. Two locks are provided for locking the lamp—one at the top, the other near the bottom. This form of lamp can be made to burn animal oil, by fitting an animal oil-wick and burner (round or flat) in it instead of the paraffin oil-wick and burner, and admitting the cold air through the lower part of the gauze caps and through air-spaces in the top flange-plate, by which means the air will descend the annular air-space between the glass chimney and cylinder and enter the bottom of the glass chimney, which chimney will require to be raised a little above the flange-plate, to allow the air to pass under it to the flame. The gauze plates, or gauze cylinder and air-chamber, before described in the paraffin oil-lamp, are not required in this last form of lamp. The inventor observes that the lamps will be useful on board ship and elsewhere, as well as in coal mines.

PROTECTING IRON AND STEEL FROM OXIDATION.—In preparing the hardening or indurating compound for the purposes of the invention of Mr. James Webster, of Birmingham, he takes about equal proportions of carbonate of potash and American ash, pulverised and mixed together, and to this is added hydrochloric acid, until carbonic acid gas ceases to be given off. The proportions in which the carbonate of potash and American ash are mixed are not material; and, in fact, he sometimes uses one or other of the substances without the other, or commercial chloride of potassium may be employed. The mixture, or combination of ingredients above named, is to be put into a close vessel, or retort, and heated so as to drive off the water, and reduce the mass to a homogeneous liquid state, when it is run off, or ladled out, and cast into blocks, which become solid when cold. If chloride of potassium be used, it will only require the addition of a little free acid to render it suitable for the purposes of the invention. Of this mixture, which may be called No. 1, take about 17 per cent., and after roughly pulverising the same, add thereto about 83 per cent. of yellow prussiate of potash, also roughly pulverised; these two ingredients are also melted in a close vessel, and when in a liquid state are fit for use, and may be called No. 2. This mixture may, however, if desired, be cast into blocks for future use, but when required for use must be reduced again to the liquid state. The metal articles to be operated upon are heated to a bright red heat, and in this state are dipped into the liquid or paste prepared, No. 2, after which they are to be left to cool a little, and then dipped in water, where they are to remain until cold. They may then be cleaned, if desired, and the hardening process will be complete. Many articles, however, require to be protected on their surfaces from oxidation, for which purpose he prepares a varnish composition, consisting principally of (say) 50 per cent. of paraffin oil, 15 per cent. of naphtha, 5 per cent. of tar, about an equal quantity of mixture No. 2, in a pulverised state, 20 per cent. of resin, and about half that quantity of heavy or tar oil. This preparation will answer very well for rough articles, which must be heated to about 300°, and then dipped into the composition. As a modification of the above varnish composition for coating the articles black outside, the following may be advantageously employed—1½ lb. of the composition above named, No. 2, and containing the cyanide of potassium; gutta-percha, 4 lbs.; creosote, obtained from gas-works, 4 lbs.; linseed oil, 50 lbs.; and paraffin oil, 40 lbs.; also sufficient bisulphide of carbon to dissolve the gutta-percha. For finer articles, the above preparation, with a less quantity of linseed oil, will be found extremely useful. For steel articles the indurating or hardening process is not required, but the surface of the article may be protected by a similar varnish composition.

WEATHER PREDICTIONS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In my last letter, I mentioned that winds would occur about the 3d—these winds were correct. Strong winds will occur again from about the 7th to the 9th; the temperature has considerably fallen; we shall now have some wintery weather during the next fortnight, with strong gales, from about the 21st to the 26th. I have been requested to inform the readers of the Journal how Admiral Fitzroy arrives at his daily forecasts of the weather. Well, it is as follows:—If the mercury in the barometer is rising, he foretells fine weather; if it is falling gently, rain; if rapidly, a gale. Certainly everybody ought to have known this. But I have already explained in my last letter that the action of the mercury in the barometer is not to be relied upon for foretelling the weather. In reply to another enquiry, in reference to my remarks on the lunar theory, I say Sir W. Herschel never did put forward any lunar theory at all. It is repudiated by Sir John Herschel in the last number of "Good Words."

26, Throgmorton-street, Feb. 4.

GEORGE SHEPHERD, C.E.,
Author of the "Climate of England."

To Directors, Solicitors, Secretaries, &c.

IMPORTANT TO ALL CONNECTED WITH PUBLIC COMPANIES.—Now ready, price 2s. 6d., A HANDY BOOK OF WHAT TO DO AND HOW TO DO IT, IN ORDER TO FORM ANY MERCANTILE, MINING, AND OTHER JOINT-STOCK COMPANIES. Designed as a PRACTICAL GUIDE for Projectors, Promoters, Directors, Shareholders, Creditors, Solicitors, Secretaries, and other officers. By THOMAS TAPFING, Esq., of the Middle Temple, Barrister-at-Law. London: Published at the Mining Journal Office, 26, Fleet-street, E.C., and to be had of all booksellers and newsmen.

With this week's Journal we give a SUPPLEMENTAL SHEET, which contains—Slate Quarrying in Easdale; Mining in Ireland—the Sheep's Head District; Institute of Mechanical Engineers; the Combarmin, North Devon, Mining District, with Plan; Manchester Association for the Prevention of Steam-boiler Explosions; the Coal Trade of New South Wales; Free Trade in Inventions; Mining Statistics of Cornwall and Devon; Naval Construction; Compensation to Landowners; Ballantyne's Miscellany, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, FEB. 5, 1864.

COPPER. £ s. d.			BRASS. Per lb.		
Best selected.....	ton	116 0 0	Sheets	11½d.-11¾d.	
Tough cake.....	"	113 0 0	Wire	10¾d.-10½d.	
Tin.....	"	113 0 0	Tubes	11¾d.-11½d.	
Old (Exchange).....	"	116 0 0	FOREIGN STEEL. Per Ton.		
Copper wire.....	p. lb.	0 1 2½	Swedish, in kegs (rolled).....	15 10 0	
ditto tubes.....	"	0 1 2½	" (hammered).....	16 0 18 0	
Sheathing & bolts.....	ton	120 0 0	Ditto in fargots.....	17 0 18 0	
Bottoms.....	"	125 0 0	English, Spring.....	18 0 23 0	
Old (Exchange).....	"	166 0 0	Bessemer's, Engineers' Tool.....	44 0 0	
IRON. Per Ton.			" Spindle.....	30 0 0	
Bars Welsh, in London.....	8 15 0	9 0 0	QUICKSILVER.....	7 0 0	p. bottle
Ditto, to arrive.....	9 0 0	0 0 0	SILVER. Per Ton.		
Nail rods.....	9 10 0	10 0 0	Foreign.....	21 10 0	
" Stafford, in London.....	11 0 0	11 10 0	To arrive.....	21 10 0	21 15 0
Ditto.....	11 0 0	11 10 0	ZINC.		
Hoops.....	12 0 0	12 10 0	In sheets.....	26 10 0	27 0 0
Sheets, single.....	12 10 0	13 10 0	TIN.		
Pig No. 1, in Wales.....	4 10 0	0 0 0	English, blocks.....	116 0 0	—
Refined metal, ditto.....	4 0 0	5 0 0	Ditto, Bars (in barrels).....	117 0 0	—
Bars, common, ditto.....	7 15 0	8 5 0	Ditto, Refined.....	121 0 0	—
Ditto, merchant, in Tees.....	6 12 0	6 0 0	Banca.....	120 0 0	—
Ditto, railway, in Wales.....	7 15 0	8 0 0	Straits.....	119 0 0	—
Ditto, Swed. in London.....	12 5 0	12 10 0	TIN-PLATES.*		
To arrive.....	12 10 0	0 0 0	IX Charcoal, 1st quality, p. box.....	1 11 0	1 13 0
Pig No. 1, in Clyde.....	3 1 0	3 5 0	IX Ditto 1st quality.....	1 17 0	1 19 0
Ditto, f.o.b. in Tees.....	3 3 0	3 4 0	IX Ditto 2d quality.....	1 9 0	1 10 0
Ditto, f.o.b. in Tees.....	3 2 0	3 5 0	IX Ditto 2d quality.....	1 15 0	1 16 0
Railway chairs.....	5 10 0	5 15 0	IX Coke.....	1 6 0	1 7 0
" spikes.....	11 0 0	12 0 0	IX Ditto.....	1 12 0	1 13 0
LEAD. Per Ton.			Canada plates.....	p. ton	14 0 0
English Pig, ordn. soft.....	5 0 0	21 10 0	In London; 20s. less at the works.		
Ditto (WB).....	22 0 0	22 10 0	Yellow Metal Sheathing.....		
Ditto sheet.....	21 0 0	21 10 0	p. lb. 10d.-10½d.		
Ditto red lead.....	22 0 0	22 5 0	Sheets.....		
Ditto white.....	26 0 0	27 0 0	p. lb. 10d.-10½d.		
Ditto patent shot.....	23 5 0	23 10 0	Indian Charcoal Pigs.....		
Spanish.....	20 0 0	—	In London.....		
* At the works, 1s. to 1s. 6d. per box less.			7 0 0 7 10 0		

REMARKS.—The intelligence received that hostilities have now commenced between the German and Danish troops, thus entirely destroying all hope that there might be a peaceful settlement of affairs, will undoubtedly have an unfavourable effect upon the Metal Market, as although the price of one or two particular metals may be considerably enhanced thereby, yet others will be much prejudiced, operations will be checked, and prices will tend downwards. It is vain to calculate for how long a period this war may continue, or what may be the ultimate result of it; but it is to be hoped that this country may not be induced to take part in the struggle, as it is undoubtedly very unsatisfactory to look forward to a change from our present position of prosperity and peace to the derangement of commercial affairs, which almost invariably follows in the path of war. At present the metal trade does not evince any very flourishing appearance, business continues very quiet, and the course of events on the Continent is being very anxiously watched, and operators generally are waiting to see what may eventually ensue. The continued tightness of the Money Market also tends to act unfavourably upon the metal market.

COPPER.—The market remains quiet, transactions are by no means numerous, and some second-hand parcels still remain upon the market, which may be obtained at 3s. to 4s. under smelters' prices.

IRON.—There has been rather more enquiry for iron during the past week, and orders have been given out for America, India, and the Continent, and, though the orders are not large, the principal makers are pretty full for some weeks to come, and in some departments for the whole quarter; still there is good reason to think that a considerable number of orders are being held back, and must soon be given out. In fact, the trade is only now coming to the last advance, as many orders are now even being executed at the prices which prevailed before the last rise, and buyers are inclined to wait and see if they can buy any cheaper; but of this there appears no probability at present. Swedish iron is looking rather better, and may be quoted at 5s. to 10s. per ton higher than formerly. The prices of Scotch pig-iron have been gradually receding during the week, political affairs having, as usual, acted upon the market, and caused unfavourable changes to take place. At the commencement of the week prices stood at 63s. to 63s. 3d. cash, 64s. 3d. to 64s. 9d. three months; then fell to 62s. cash, and 63s. 3d. three months. It afterwards rallied to 62s. 1½d. cash, and 63s. 8d. three months, and the last advices from Glasgow state that a good business had been done at somewhat irregular prices, the market closing at 62s. 3d. cash, 62s. 9d. one month, and 63s. 9d. three months.

LEAD.—The market continues firm, with a fair business doing at 21½d. for common English pig, and 22s. 6s. to 22s. 7s. 6d. for WB.

TIN.—Business in this metal remains very limited; prices continue without alteration. A small parcel of Straits has been sold at 119s., but there are sellers at lower rates for larger parcels. Advices from Amsterdam state the price of Banca there to be 71½s., at which there remain sellers. The stock in the hands of the Trading Society for the next sale is 75,338 slabs, against 75,950 slabs same time last year.

SILVER.—Transactions in this metal still continue limited; prices have, however, somewhat advanced, and, now that war has actually commenced on the Continent, there is every probability of prices still going higher. Some parcels have been sold on the spot at 21s. 15s., for Feb. delivery at 21s. 10s., and for March delivery at 21s. 15s. The stock in London at the commencement of the month was 6177 tons, being an increase during the month of 841 tons.

STEEL is without any alteration.

TIN-PLATES.—A fair business is doing, and makers are firm at the advanced rates.

QUICKSILVER.—The position of this metal continues still the same.

SCOTCH PIG-IRON.—Figures are independent of sentiments and sympathies. In the spring of 1848, when war broke out in Germany, the stock of pig-iron in Scotland was 100,000 tons, and the furnaces in blast were 100, producing 11,500 tons weekly. The price was then 50s. per ton, and it thereafter rapidly fell to 40s. per ton, fluctuating between 36s. and 45s. till July, 1852. To-day the stock is upwards of 800,000 tons, with 134 furnaces in blast, making about 24,000 tons weekly. The price is 62s. 6d. per ton, being about 10s. per ton above the average of the last six years.

MIDDLESBROUGH-ON-TREES, JAN. 30.—Our pig-iron market has experienced no change during the month. Prices are the same as last reported. The decline in Glasgow and the Danish question have produced no results of a prejudicial character, beyond the fact that buyers are less anxious to place orders, in the hope of the ironmasters relaxing their prices, which in the present temper of the market is not likely to take place. It is true that prices in Glasgow have receded considerably; but then, the Glasgow market is purely a fluctuating one. Dear money and the Schleswig complications have had the effect of forcing it down, and the "bear" have laboured assiduously to give effect to the fall to suit their own ends. Manufactured iron has advanced 10s. per ton on some descriptions, and 20s. per ton on others. The exorbitant demands of the men for increased wages have been complied with, and the manufacturers had no alternative but to protect themselves by a further advance.—ROBERT STEPHENSON AND CO.

COAL MARKET.—On Monday, there was a further arrival of 87 ships, which, with those standing over from last week, gave a large quantity of all descriptions of coal for sale. The weather being favourable an active business was done in household coals, at last day's prices. Hartley's and manufacturers' were dull, at previous value. Best house coal, 19s. to 20s.; seconds, 17s. to 18s.; Hartley's, 13s. 9d. to 14s. 9d.; manufacturers', 13s. to 16s. per ton.—On Wednesday, there were 13 arrivals. The change to mild weather produced a dull market, and the amount of business transacted was very trifling, house coal quoting the same prices as on Monday, Hartley's 3d. per ton lower.—On Friday, there were 46 arrivals. The cold weather imparted a firmer tone to business, and some considerable sales were effected, at last prices, for all descriptions. Hetton Wallsend, 20s.; South Hetton Wallsend, 20s.; Lambton Wallsend, 19s. 6d.; Brad-dy's Wallsend, 18s. 6d.; Eden Main, 18s.; Harton Wallsend, 17s.; Framwellgate Wallsend, 17s.; Pitlington Wallsend, 17s.; Hetton Lyons

Wallsend, 17s.; Hasting's Hartley, 14s. 9d.; Bute's Tanfield, 15s.; 62 cargoes unsold; 100 ships at sea.

LIVERPOOL COAL TRADE.—From the Coal Circular of Messrs. Platt we learn that the quantity of Cannel coal, coke, and patent fuel shipped at Liverpool in Jan. was 67,765 tons, and in the corresponding month of last year 41,005 tons, showing an increase last month of 26,760 tons. The exports coastwise during Jan. were 7716 tons; same month last year, 5415 tons—increase last month, 2301 tons. Total exports coastwise from Jan. to Dec., 105,178 tons; same period last year, 85,036 tons—increase this year, 20,142 tons.

COAL CONTRACT.—The Admiralty require the supply of 8500 tons of South Wales Coal, for the steam-ships at Bermuda.

The MINING SHARE MARKET has been moderately active this week, and decidedly more business doing, though still below what the price of metals would seem to justify one in expecting. The chief demand has been for Grenville, East Caradon, Prosper United, Hingston Down, Great Busy, East Lovell, Wheel Crebor, East Grenville, West Caradon, Wheel Trelawny, Pendean, Wheel Basset, Gonamena, Wheel Buller, Wheel Chiverton, West Chiverton, Wheel Harriett, Kitty (Lelant), Bryntail, &c. West Chiverton, 55 to 56; the 80 west, on Williams's lode, is worth 100s. per fm.; the 80 east, 25s. per fm.; the 70 west, 10s. per fm.; the 60 west, 10s. per fm.; the 50 west, 25s. per fm.; the lode in the shaft, 60s. per fm.; Valpy's lode, in the 80 east, 15s. per fm., and improving; the 80 west, 30s. per fm.; No. 2 winze, under the 70, on Williams's lode, 60s. per fm. Wheel Chiverton, 11½ to 11¾; the mine is progressing favourably. Hingston Down shares have been in good demand, up to 5½, and leave off 5 to 5½; the lode in the 110, west of Morris's shaft, has improved to 120s. per fathom, and promising further improvement. Wheel Grenville shares have been largely dealt in, and leave off 5½ to 5¾; the 125 tons of copper ore that we estimated last week at 1000s., has realised 1020s. 19s. 6d. We also find the committee have determined to erect 16 more heads of stamps, with an engine to work 32 heads night and day, by which means large returns may be made at a good monthly profit, without trenching upon the reserves of tin, which the agent estimates already at about 18,000s., and they are being added to every month. As we said last week, this extra machinery, which may cost 1000s., may be paid for from the profits of increased returns of tin in a very short time; but if the shareholders determine upon paying for it by a small call, they could then commence dividing the profits at once. At the next meeting the returns of tin will be about 1500s.; copper, 1000s.; total, 2500s. for the quarter; and costs, increased this time by the building of burning-house and making tin-floors, of about 2400s. to 2500s.; and if, as we are assured, the tin returns alone can be increased to 4000s. per quarter, large profits will result. Wheel Crebor shares have risen to 39s., 40s., and in demand. A week or two ago the cross-course came into the shaft, where the lode had previously been worth 6 to 8 tons per fathom, and shares dropped from 40s. to 36s. very suddenly. The lode is now coming in again under the cross-course. Wheel Basset shares, after declining to 75, advanced this week to 80, 85; at the meeting the accounts showed a profit on the two months' working of 801s. 18s. 4d., and a dividend of 12s. 10s. per share (768s.) was declared, leaving 1437s. 18s. 9d. in hand. The report states the old engine-shaft, on the great lode, is sinking below the 150, on the north part of the lode, which is large and improving, and occasionally producing stones of ore. There is no alteration in the tribute department of tin and copper. Wheel Buller shares advanced to 50 on Wednesday, then declined again to 45, and leave off 44 to 46.

Wheel Hope, 5 to 5½; the lode in the shaft is worth 9s. per fathom. In the back of the 75 there is a lode worth 15s. to 20s. per fathom. The lode in the adit, west of the south lode, yields good work for lead, and is an important point. Wheel Grylls, 28 to 29; the mine sold yesterday 21 tons of tin, for 1366s. 19s., leaving a profit of 300s. on the month's working. The mine is improving. East Grylls, 13½ to 14½; this mine has improved in the adit east. Great Wheel Grylls, 4½ to 5½; in demand; the mine is improving in Fisher's lode. Grylls Wheel Florence, 3 to 3½; this mine, considered by competent judges as one of the best speculations in the Grylls district, has passed into new hands, and after payment of purchase-money, &c., a sum of 4000s. remains in hand, which, we are informed, is considered sufficient to bring the mine into a profitable state, without any call upon the shareholders. The mine immediately adjoins Wheel Grylls, and the Georgia, Standard, and Fisher's lodes of the latter form a junction in Florence, and pass through the sett; and the Wheel Grylls Company, we understand, in 1859, drove one of their levels into the sett, and in a month took out 300s. worth of tin, which caused a lawsuit, only just ended. Above the adit level Florence has produced tin during the last two years, amounting to 1789s., and copper 250s.; and in the bottom of the deep adit the Standard lode for 15 fathoms in length is worth 18s. per fathom, and can be worked at 4s. per fathom. To work the mine effectually, a steam pumping-engine, together with tin stamps, has been purchased, and the management entrusted to Capt. Rogers, of Wheel Grylls, who concludes his report, inserted in another column, by remarking that he has no doubt a small outlay will put Grylls Wheel Florence into the Dividend List. East Russell, 5 to 5½; Bryn Gwrog, 35 to 36; Calvadnock, 6 to 7; Clifford Amalgamated, 88½ to 39; Condurrow, 100 to 110; Drake Walls, 37s. 6d. to 40s.; East Basset, 66 to 68; East Carn Brea, 7½ to 7¾; East Wheel Grenville, 24 to 24½.

East Lovell, after "buying in" day on Tuesday, became flat, and leave off 8½ to 8¾; the report states that the lode in shaft is 8 feet wide, worth 100s. per fm.; the 20 end, on the north lode, 70s. per fm.; the stopes are worth on an average 50s. per fm. Gonamena, 3 to 3½; Grambler and St. Aubyn, 9 to 10; Great South Tolgus, 4½ to 4¾. Great Wheel Vor shares have advanced to 17, 17½. Lady Bertha, 15s. to 17s. 6d.; Marke Valley, 6½ to 7. East Caradon shares have been firmer, and leave off 27 to 28; the lode in the 70 east has improved to 25s., and is a very important point. Nangiles, 35 to 36; North Chiverton, 2½ to 2¾; North Crofty, 5½ to 5¾, mine improved. North Downs have been flat, and leave off 1½ to 2½, sellers. North Rosekar, 24 to 26; North Trelawny, 2½ to 3½; Pendean, 6½ to 7½; Prince of Wales, 5s. to 6s. Prosper United advanced to 7½, 7¾, but leave off 7½ to 7¾. Providence Mines, 43 to 45. At Great Wheel Busy, the profit on the month's working, we hear, is 650s.; in the engine-shaft the lode is worth 25s. per fm.; Offord's shaft, 25s. per fm.; in the 130 east, 35s. per fm.; the winze below the 120 is worth 40s. per fm.; the stopes in back of the 130 are worth on the aggregate 110s. per fm. At Boscawen, the 70 west is worth 30s. per fm. At Gawton Copper, the ore for the month realised 268s., at a cost of 195s.; the lode is worth from 6 to 8 tons per fathom. Rosewall Hill and Ransom, 3 to 3½; South Tolgus, 4½ to 4¾; North Basset, 2½ to 2¾.

At East Rosewarne meeting the accounts showed a balance in favour of the mine of 420s. 6s. 3d. The agent says the returns will depend on how the ground opens, but there is a fair prospect of raising quite as much for the next as for the past four months; and, with the improved standard, a better price will be realised. Bryntail, 2½ to 3; the lode in the 30 west is worth fully 30s. per fathom, the bottom being even better. St. Day United, 35s. to 37s. 6d.; Tincroft, 20½ to 20¾; Trelawny, 35s. to 40s.; West Caradon, 22 to 23; West Frances, 27½ to 28½; West Seton, 190 to 200; West Tolgus, 57½ to 62½; Wheel Kitty (St. Agnes), 8; Wheel Margaret, 17 to 19; Wheel Seton, 165 to 170; Wheel Trelawny, 24 to 25; Wheel Ury, 6½ to 7½. West Jane, 24s. to 26s.; at the meeting a call of 3s. 6d. per share was made.

On the Stock Exchange, a steady demand for Mining Shares has continued during the week. The following quotations are officially recorded in British Mining Shares:—Cambrian, 3½, 4½; Hingston Down, 4½, 4¾; North Downs, 2½; Wheel Seton, 166; Chiverton, 11½, 11¾; Clifford, 38½, 38¾; Great Wheel Vor, 16½, 17½; Grenville, 5½, 5¾; Wheel Trelawny, 24½; East Basset, 68; Tincroft, 20½; Wheel Buller, 49½; East Caradon, 27½, 27¾; West Caradon, 22. In Colonial Mining Shares the prices were:—Cape, 8½, 8s. 7½; Port Phillip, 1½; Yudanamatana, 2½, 2¾, 2½; Kapunda, 1½. In Foreign Mining Shares the prices were:—Don Pedro, 4½, 4¾; St. John del Rey, 51½, 52; United Mexican, 64, 64½; Copiapo, 5; Panuncillo, 2, 2½, 2¾; East del Rey, 4; Pontigbaud, 7; Cobre, 31½, 31, 31½, 32.

IRISH MINE SHARE MARKET.—The events in Denmark command, of course, great attention from the habitual speculators in Stock Exchange securities, which, therefore, generally suffered comparative neglect. Considering these adverse circumstances, we may say that our Mine Share Market was unusually well supported; for, although transactions were not as numerous as during the previous week, yet prices were well supported, and business was done in Mining Company of Ireland, Wicklow Copper, and Connoree shares at former rates. General Mining Company for Ire-

land shares were again ineffectually pressed for sale. The failure of Mr. Thomas Saunders Cave, the proprietor of the once famous Audley Mines, is much regretted, as likely to injure the general mining interest of Ireland. It is a fact well known by the better informed, that legitimate mining enterprise is not the cause of Mr. Cave's present difficulties, no more than it was of his former bankruptcy.

The detailed prospectus of the New Combmartin Silver-Lead Mining Company, to the formation of which we alluded in our last, will be found, together with a plan of the mine, showing the various lodes, &c., existing in it, in the Supplemental Sheet given with this day's Journal. Great interest attaches to the fact that it is generally considered to be that referred to by the historians of antiquity as being particularly rich and valuable. The capital which it is proposed to raise to develop the enterprise is 16,000*l.*, in shares of 2*l.* each, but this amount will only be called up as required, it being distinctly stated in the prospectus that no call, beyond the 15*s.* payable up to the date of allotment, will be made for one year, and that subsequent calls will not exceed 5*s.* per share per three months. The lease is held for 21 years, at 1-15th royalty, and there is an excellent stream of water for dressing purposes, as well as unusual facilities for carriage of materials and freight of ore. The ore already raised is of first-rate quality, and it is considered questionable whether more than the allotment deposit will be needed before the mine is in a position to pay cost. It appears that 17*l.* 5*s.* per ton has been offered for the ore by Sims, Williams, and Co., of Llanelli. The vendors have agreed to accept 2000 paid-up shares as payment in full for the property.

The West Clifford United Tin and Copper Mining Company, with a capital of 30,000*l.*, in shares of 5*l.* each, has issued its prospectus. It is considered that the prospects of the West Clifford United will bear comparison with any progressive mine in the county. The purchase-money has been fixed at 10,000*l.*, one-half of which will be taken in paid-up shares of the company. The reports of Capt. Elisha Ralph, Francis Pryor (who occupies a seat at the board), the late William Martin, Thos. Richards, and James Rowe will be found appended to the prospectus, which appears in another column of this day's Journal.

The Old Wheal Lopes is about to be re-worked, on the Limited Liability Principle, as the Devon Wheal Jewell Company. The mine was worked by a company of local adventurers some years since, who, it is stated, expended considerable sums in opening the mine, and had raised some good copper ores; but having several other adventures in hand, and the copper standard having fallen very low, whilst blende, of which there was a large quantity in the upper levels, was then unsaleable, they determined to stop working, though, in the opinion of practical men in the neighbourhood, there was every prospect of making large returns in depth. The lord, the late Sir Ralph Lopes, was so annoyed at not receiving profits, that he refused to grant another sett, although frequently applied to for it. When the present lord, Sir Massey Lopes, M.P., succeeded to the property, a lease was granted to a few adventurers, and a London company was formed for working it, but the funds having been exhausted it was decided to abandon the enterprise, although some good machinery had been erected. The promoters of the present adventure consider that there is an opportunity for stepping in to reap the advantages of their predecessors' outlay. The presence of copper in large quantities in the lower levels is well known to practical miners in the neighbourhood, who have worked in the mine, and it must be borne in mind that copper is nearly double the price now that it was then. The lode is left standing in the shallow levels, and has been examined to the 30, being largely mixed with blende, and estimated to yield now more than 4000*l.* An ample supply of water affords a cheap and ready motive-power, while the Plymouth and Tavistock Railway runs close by the mine.

The Titanic Iron and Steel Company, to the formation of which allusion was made in last week's Journal, have given notice that the list of applications for shares will be closed on Saturday next for London, and on the Monday following for the country, after which the allotment of shares will be proceeded with. The vendors' shares are only entitled to dividend when the other shares receive dividends at the rate of 6 per cent. per annum, after which they receive all surplus up to 6 per cent. on their shares, any further surplus being divided equally. It is remarked that the quantity of steel now consumed in England is very large, and is daily increasing, in consequence of the use of that material for railway tyres, rails, points, crossings, and other purposes to which it has not hitherto been applied to any considerable extent, in consequence of its great cost. The engineers who have been consulted by the directors have reported favourably upon the undertaking.

The Wallachian Petroleum Company, with a capital of 120,000*l.*, in shares of 10*l.* each, has issued its prospectus. The company has been formed for the importation from Wallachia of petroleum, proved by analysis to be equal, if not superior, to the Pennsylvania, and the purchase of the grant and concessions enjoyed by the Earth Oil Import Company, the *recheu* fee company simply agreeing to adopt the first company's outlay for purchase of oil, advances on forward delivery, tanks, &c.—this arrangement being of mutual advantage, three of the Earth Oil directors have joined the board. The advantage of the efficient transport service organised by the old company will thus be secured, together with all the grants and concessions. It is mentioned that the grantees and contractors are under contract with the company, for fifteen years, to deliver the oil at Ibraia, at 5*l.* per ton, in consideration of their sharing with the company, in equal moieties, the net profits derived from the sale on this side—an arrangement calculated to ensure a large profit to the shareholders, and which will prevent the necessity on the part of this company of any but a very small outlay in plant. A cargo of the oil has already arrived, and will yield a very satisfactory profit.

The Great Eastern Northern Junction Railway prospectus has been issued under the auspices of the General Credit and Finance Company of London. The capital is 1,500,000*l.*, one-half of which has been already placed; and the remainder, upon which the deposit on application is limited to 10*l.* per share, and no other payment will be required until after the passing of the Act, will be offered to the public. The railway is not without importance to the readers of the *Mining Journal*, its object being to put the coal fields of the North in direct communication with London. The company proposes to make a trunk line in extension of the Great Eastern main line through Cambridge, from Stanton, near St. Ives, and proposes to pass through Ramsey, Peterborough, Lincoln, and Gainsborough, to Doncaster and Askern, communicating at Peterborough, through the Great Eastern Station, with the London and North Western, the Midland, and Great Northern Railways—forming junctions at Lincoln with the Great Northern, the Midland, the Manchester, Sheffield, and Lincolnshire, and at Gainsborough with the two latter companies—and forming junctions near Doncaster and Askern with the West Riding and Grimsby Railway, through which it will reach Wakefield, with the South Yorkshire, gaining access to the Great South Yorkshire coal field, with the Great Northern at the Doncaster Station, with the Lancashire and Yorkshire at Askern, and with the North Eastern for Hull, through the South Yorkshire Railway at Thorne. The Great Eastern agree to work and maintain, and pay all revenue expenses of the line, when made, upon receiving 45 per cent. for working expenses, and other arrangements have also been made, the result of which is that "practically the shareholders are guaranteed a minimum dividend of 5*l.* per cent., without any limit as to the maximum." The chairman and five directors of the Great Eastern Railway are upon the board.

At Redruth Ticketing, on Thursday, 3382 tons of ore were sold, realising 20,426*l.* 7*s.* 6*d.* The particulars of the sale were:—Average standard, 136*l.* 3*s.*; average produce, 6*l.*; average price per ton, 6*l.* 1*s.*; quantity of fine copper, 218 tons 6 cwt. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Dec. 31.....	3281	128 0 0	6 6	£6 0 6	£87 18 0
Jan. 10.....	1815	136 18 0	6 6	5 9 0	91 1 0
" 21.....	5329	144 6 0	6 6	5 6 0	94 19 0
" 28.....	9873	137 1 0	6 6	5 6 0	95 4 0
Feb. 4.....	3384	136 3 0	6 6	6 1 0	93 11 6

Compared with last week's sale the decline has been in the standard 1*l.* 15*s.*, and in the price per ton of ore about 2*s.* 6*d.* Compared with the corresponding sale of last month, the advance has been in the standard 4*l.*, and in the price per ton of ore about 5*s.*

At the East Rosewarne Mine meeting, on Monday (Mr. Rowlands in the chair), the accounts showed a credit balance of 420*l.* 6*s.* 3*d.*—Details elsewhere.

At the East Wheal Fortune (Stithney) general meeting, on Wednesday (Mr. C. B. Barry in the chair), the accounts for the nine months ending Dec. 31 showed a credit balance of 104*l.* 1*s.* 11*d.*. It was resolved that Mr. Jehu Hitchens be appointed London agent. The report stated that the adit level was within 40 fathoms of the great intersection of lodes, where it was the opinion of all practical miners acquainted with the district that an extraordinary deposit of tin will be found. The sett is situated in one of the richest tin districts in Cornwall, having on the west the far-famed Wheal Vor and Wheal Metal, and to the east the rich lodes of Wendron; and from the num-

ber of lodes running through the sett, with their many intersections, there can be but one opinion—that Wheal Fortune is a sett of great value.

At the East Wheal Fortune and Wrey Consols meeting, on Wednesday (Mr. J. C. Isaac in the chair), the accounts showed a credit balance of 215*l.* 17*s.* 5*d.*. A call of 5*s.* per share was made. Capt. Robert Knapp reported upon the points of operation. At Goumare Mine meeting, on Jan. 28, the accounts for Sept. and Oct. showed a credit balance of 322*l.* 6*s.*. A call of 2*s.* per share was made. Captain Richard Pascoe reported that he considered their prospects very encouraging. He hoped to get raised 20 tons of ore for the market by the next general meeting, which in addition to the 40 tons already at the surface will make the first sale 60 tons.

At the Wentnor Mining Company meeting, on Jan. 29 (Mr. W. Page in the chair), the accounts to Dec. 31 showed a credit balance of 121*l.* 9*s.* 2*d.*. Messrs. Myers and Barnes were re-elected directors, and it was resolved that the course of working suggested by Mr. William Barry be approved.

At Craddock Moor Mine meeting, on Jan. 28, the accounts for Sept. and Oct. showed a credit balance of 971*l.* 12*s.* 6*d.*. Captains H. and J. Taylor and H. Phillips reported upon the various points of operation. They propose to sell about 330 tons of copper ore for the next two months.

At the Great Laxey Mining Company special general meeting, on Wednesday (Mr. W. Tuxford in the chair), the resolutions passed at the special general meeting of shareholders, on Jan. 13, altering the 14th and 50th regulations of the company, were unanimously confirmed.

At Penhallow Moor Mine meeting, on Jan. 25, it was resolved that the mine should be carried on upon the Cost-book System, in 512 parts, or shares. A call of 1*l.* per share was made. Capt. George Tremayne was appointed manager, at 3*l.* 3*s.* per month; and Capt. Joseph Champion resident agent, at 7*l.* 1*s.* per month. Messrs. Loam and Son were appointed engineers, and Messrs. Vigurs and Thomas Boyle, jun., surgeons of the mine. It was resolved that Messrs. Waters, H. B. Champion, Loam and Son, and Captain Grose, together with the agents of the mine, be authorised to purchase an engine of sufficient size to prove the ground, and that the same be erected as soon as practicable on such part of the sett as they may determine. Capt. J. B. Champion reported favourably upon the sett: it is an extensive one, through which several lodes producing lead and silver ore pass; it is a part of East Wheal Rose original sett, and the lodes are partially laid open. It is of highly mineralised character, and in what is well known to be the greatest lead-producing district in Cornwall.

At Wheal Trannack meeting, on Jan. 26, the accounts showed a debit balance of 49*l.* 1*s.* 8*d.*. A call of 2*s.* 6*d.* per share was made. At the Calvack Mine meeting, to be held on Wednesday, the accounts to be submitted show—Call, 320*l.*; black tin sold, 234*l.* 2*s.* 9*d.*; extra carriage, 1*l.* 12*s.* 3*d.*; old stores sold, 3*l.* 18*s.*—268*l.* 6*s.*. Balance last audit, 325*l.* 5*s.* 9*d.*; mine cost, 178*l.* 1*s.* 7*d.*; merchants' bills, 450*l.* 2*s.* 9*d.*; dues (say), 70*l.*; leaving credit balance, 351*l.* 15*s.* 11*d.*. The report will be of an unusually favourable character.

At the West Wheal Jane meeting, on Thursday, a call of 3*s.* 6*d.* per share was made.

At Penrill Mine general meeting, on Friday (Mr. J. Bird in the chair), a call of 2*s.* per share was made. The meeting was adjourned to March 15, waiting a special report of the mine.

At Roskear Mine meeting, on Jan. 30 (Mr. J. E. Square in the chair), the accounts for the three months ending Dec. showed a credit balance of 2913*l.* 19*s.* 3*d.*. It was resolved that Capt. Skewis be requested to ascertain on what terms he can obtain a second-hand or new 60-in. cylinder-engine, with two 11-ton boilers.

At the Dun Mountain Copper Mining Company meeting, on Monday (Mr. Scandlers in the chair), the report of the directors was received and adopted. Details in another column.

BOSTON, JAN. 18.—Sidney and Pictou Coal remain without change. There have been sales of Sydney at 8*s.* to 8*s.* 6*d.*; and Pictou at 8*s.* 5*d.* to 8*s.* per ton. English Canal is selling in small lots at 8*s.* 10*d.* to 8*s.* 12*d.* per ton. Anthracite has been in steady retail demand at 12 per ton. The market is very firm for Scotch pig-iron, with sales at 48*s.* to 50*s.* per ton, cash and four months, for Gartsherrie and other brands No. 1; and American No. 1 at 47*s.* to 50*s.* per ton. In bar-iron the sales have been in small lots, but at full prices. In Russia sheet-iron the sales have been in small lots at 22*s.* to 25*s.* per pound, as to size.

NEW YORK, JAN. 20.—Refined ingot copper has been in animated demand at 39½*c.* to 40½*c.* for Baltimore, 40*c.* for Bergenport, and 41*c.* to 42*c.*, cash, for Lake Superior, with sales of 2,050,000 lbs. during the week. Yellow metal sheeting has advanced to 36*c.*, and ditto bolts to 36½*c.*, six months. New sheeting bolts and braziers copper command 50*c.*, six months. Domestic coal is plenty, and the market is heavy; small sales at 7*s.* to 10*s.* per yard. Foreign is higher, and in fair demand; sales of 2000 tons Gas Cannel and 100 tons Kirkcaldy Hall Cannel, here and to arrive, on private terms; 1500 tons Liverpool Gas Coking at 15*s.*; 10 tons Blackburn House Cannel at 16*s.*; and 200 tons Ravewood Gas Cannel at 15*s.*, delivered. The regular monthly sales of Scranton is announced for the 27th inst.

YUDANAMUTANA MINES.—The *Orient*, from Port Augusta, South Australia, with 240 tons of copper ore on board, the produce of these mines, has arrived in London. Three other vessels, named respectively the *Countess of Eife*, *Clan Alpine*, and *John Norman* (the two first of which are now due), having collectively about 400 tons, are shortly expected. Previous parcels of ore from these mines, sold at Swansea, having averaged 33 per cent. of copper, the above quantities will, therefore, in all probability, give a total of 20,000*l.*

RICH FOREIGN COPPER ORES.—The ship *Oracle* has just reached England from Chili, conveying upwards of 1000 tons of rich copper ore from the valuable Chilean copper mines of Mr. Sampson Waters, of Gyllyngdune, having accomplished her passage—we believe the shortest on record—in 74 days. This ore will yield a produce of from 26 to 30 per cent., and is worth upwards of 20,000*l.* The late rise in the copper standard greatly affects these mines; and the cargo here referred to will fetch from 6*l.* to 7*l.* per ton more than at the time it was shipped. One of our correspondents states that a very important run of ground has taken place at the San Pedro, one of the very rich copper mines in Chili, of which Mr. Waters is the sole proprietor. Full particulars will not be received until the arrival of the next mail; but it is stated the run will involve the necessity of sinking a new shaft from surface to the 100, to enable them again to get under the ore ground, which will, probably, cause a delay of 12 months, and an expenditure of 4000*l.* or 5000*l.* The other mines of Mr. Waters, especially the Descubridora, are, if anything, richer than ever, as 1000 tons a month can be taken away without any appreciable difference in the mine, and at merely nominal cost. The ore of this mine, which is 70 miles nearer the coast than the San Pedro, are shipped at Pan de Azucar.

VALUABLE INVESTMENT.—FOR SALE, 108 North Rosewarne, 6 South Gorland, 6 West Penrithall, 60 Aberffraw, 12 Nant-y-lago, being mines in the office of Mr. Richard Tredinnick, Lombard-street. £90 will be taken for the above.—Apply to Mr. Bissop, 16, Abchurch-lane, City.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C., pays particular attention to British Lead, Copper, and Tin Mines, for which he solicits orders to sell or buy, at net prices. Mr. BATTERS can recommend one or two mines safe for an early rise of 100 per cent.; reliable information afforded on application.

BUYER of Chilverton. SELLER of 15 Central Miners, £3; 5 Brynford Hall, £16; 60 West Trevelyan, 3*s.* Parties would do well to apply to Mr. BATTERS as to buying or selling Central Miners shares.

MR. C. H. ANDREWS, STOCK, SHARE, AND MINING BROKER.

7, CROSBY HALL CHAMBERS, BISHOPSGATE STREET, E.C. Andrews's "Stock Exchange Evening Prices and City Financial Circular" contains an epitome of the day's transactions in the English Funds, Foreign Stocks and Bonds, Railways, Joint-Stock Banks, Miscellaneous Shares, and Mines. Andrews's "Daily Circular" also contains particulars of the movements in Bullion, variations in the Foreign Exchanges, and impartial accounts of the Money and Discount Markets.

MR. THOMAS CARTHEW, MINING OFFICES, 12, BUCKLESBURY, LONDON, E.C. Reliable information respecting mining generally can be obtained by applying as above. Bankers: Roberts, Lubbock, and Co., 15, Lombard-street, London.

MR. WALTER TREGELLAS, STOCK AND SHAREBROKER, 12, ST. MICHAEL'S ALEY, CORNHILL, LONDON, E.C. Mr. TREGELLAS strongly recommends the purchase of Santa Barbara Gold, North Shepherd, and Chilverton Consols shares.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon. MINES INSPECTED and faithfully REPORTED ON. DEALER IN MINING, RAILWAY, and OTHER SHARES. His monthly "Circular" for December contains a selected list of Cornish and other mines. Forwarded on receipt of six postage stamps. 38, Dowgate-hill Chambers, London, E.C.

MR. EDWARD BREWIS, STOCK, SHARE, AND MINING BROKER, 40, GREY STREET, NEWCASTLE-ON-TYNE, would respectfully request the public, before operating in the MINES of the NORTH-EAST or ALSTON MOOR DISTRICT, to apply to him, as it may be the means of saving them hundreds of pounds.

Bankers: Hodgkin, Barnett, Pease, and Spence.

JAMES H. COCK, MINE SHAREBROKER AND DEALER, REDRUTH, CORNWALL.

J. H. Cock, having had 10 years' experience in the mining market, and being thoroughly acquainted with mines and their management, is in a position to advise or do business on the most advantageous terms. Cash or time bargains promptly attended to.

TO SPECULATORS.—MR. HALSE, the writer of the letters signed "A Cautious Man," is always in a position to recommend a few good dividend mines; also one or two mines where the shares are selling at a few shillings each, and in which the chances of a good rise are very great. A capitalist with about £5000 could make 20 per cent. of his money if he would act as Mr. HALSE would recommend.—Address, Mr. HALSE, Sharedealer, 28, Throgmorton-street, City.

TO INVESTORS.—CONSULT MR. GRIFFITH, 27, LEADENHALL STREET, LONDON, E.C., who ADVISES as to the RESPECTABILITY, VALUE, and PROBABLE PROSPECT OF SUCCESS OF ANY SCHEME, PUBLIC COMPANY, &c., whether already established or in course of formation.

MONEY.—CONTRACTORS and OTHERS can be ACCOMMODATED with LOANS, DISCOUNTS, &c.—Apply to Messrs. WILKINSON and CO., monetary negotiators and arbitrators, &c., 25, Birch-lane, Cornhill, London, E.C.

THE TIN TRADE.—(From a Correspondent).—In proof of the fallacy of the argument that the miner would obtain a better price for his tin ore were the system of sale by ticket re-introduced as a substitute for the present system of private sale, it should be well understood that the margin between the price paid to the miner and the price paid by the consumer, was probably never smaller than at present, and that as that difference is only about 5*l.* per ton, the miners could not hope to receive more than at present by any change being introduced, whilst they might be compelled to accept considerably less. The standard for tin is at present—Common, 111*l.*; best common, 112*l.*; fine, 113*l.*; and best fine, 115*l.*; but as the smelters really pay rather above than below these rates, hopes are entertained that an advance in the price of metal will be decided upon, for it is feared that the difference between the smelters' buying and selling price is too small to allow them a fair remunerative profit, and that unless the price of the metal advances, the present price for ore cannot be maintained.

IRONSTONE MINES IN LINCOLNSHIRE.—Messrs. Dawes, of the Milton Ironworks, near Barnsley, have taken an extensive tract of land on the Lincolnshire side of the River Trent, opposite Keadby, and opened extensive blast-furnaces there. They are making about 500 tons of iron per week. The immense mineral wealth of this locality, which was only discovered about two years ago, will give employment to large numbers of men, and when railway communication is opened, as it shortly will be, with the Yorkshire side of the river, the new trade will still further be developed.

IMPROVEMENTS IN BLASTING.—An improved safety tamping-rod has been introduced by Messrs. West and Son, of St. Blazey, which is now in use at Far Consols and Fowey Consols. It is stated that the new rod can be supplied at a small cost, and will do much to prevent accidents from blasting.

SUBSTITUTE FOR FELT AND KAMPTULICON.—Mr. H. Reynell, of Exeter, proposes as a substitute for felt and kamptulicon, manufactured in the usual way, a material produced from cocoa-nut fibre. The fibre is separated and broken until it almost forms a pulp, and is then formed into the sheets for use.

DISTILLING BITUMINOUS SUBSTANCES.—Mr. John Saunders, of New York, proposes to distill the bituminous substances by means of heated gases applied directly thereto.

Pigs of lead, with the name of the Emperor Hadrian upon them, have been found in the Island of Sardinia, where the Romans, as is well known, had important metallurgical establishments. The Maresilles house, Bouquet, which owns extensive mines in the island, has made a present of these pigs to the museum at Cagliari.

It is said Sir W. Atherton realised upwards of 30,000*l.* in the years of 1861 and 1862 by patent fees alone.

The aggregate steam-power of Great Britain is set down at 82,685,214 horse-power, or equal to 400,000,000 men. The power of steam makes England, with a population of 30,000,000, produce wealth representing the labour of a population twenty times that number.—*American Paper*.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending January 31 was 10,802*l.* 2*s.* 2*d.*

THAMES TUNNEL COMPANY.—Receipts for the week ending January 30, 84*l.* 0*s.* 11*d.*; number of passengers, 20,171.

LEAD ORES.				
Sold on the 30th January.				
Mines.	Tons.	Price per ton.	Amount.	Purchasers.
Ludcott and Wrey Consols.....	50	£19 1 6	£955 0 0	Trefry's Trustees.
ditto.....	45	17 15 6	785 4 0	ditto
ditto.....	40	5 14 6	586 4 0	ditto
Cwmbrane.....	20	12 19 0	2438 0 0	Sims, Williams, & Co.
Sold on the 1st February.				
Cwmystwith.....	100	13 18 0	1318 0 0	ditto
Gloagach.....	40	17 15 0	696 0 0	Stock & Co.
Sold on the 24th February.				
Frank Mills.....	90	16 6 6	1440 0 0	J. & J. Williams.
ditto.....	70	14 1 6	988 0 0	Trefry's Trustees.
Sold on the 3d February.				
Minera Union.....	21	14 5 6	295 2 0	Jenkins Brothers.
Sold on the 4th February.				
Wheal Mary Ann.....	50	27 3 6	1368 0 0	Stock & Co.

SILVER-LEAD ORE.				
Sold on the 20th January.				
Mines.	Tons.	Price per ton.	Amount.	Purchasers.
Silver Mountain.....	21½	£14 5 0	£300 6 3	Sims, Williams, & Co.

BLACK TIN.				
Sold on the 28th January.				
Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Gurlyn.....	4 3 0 26	£29 10 0	£1259 4 6	Chyandour.
Sold on the 4th February.				
St. Wh. Basy.....	17 18 1	111 12 0	1911 12 0	—
Sold on the 1st February.				
St. Just United.....	25 5 0 0	—	1790 0 0	—

COPPER ORES.				
Sold on the 27th January.				
Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Okef Tor.....	32 1 0 0	£2 4 6	£64 12 0	Landore Co.
ditto.....	91 10 2 0	5 4 6	478 1 9	ditto
Sold on the 1st February.				
Gawton.....	70 10 0 0	—	263 4 3	—

COPPER ORES.									
Sampled Jan. 20, and sold at Tabb's Hotel, Redruth, Feb. 4.									
Mines.	Tons.	Price.	Mines.	Tons.	Price.				
Clifford Amalgamated.....	100	£13 6 6	East Pool.....	28	£4 9 0				
ditto.....	99	4 16 6	Wheal Bassett.....	71	5 8 6				
ditto.....	94	5 14 6	ditto.....	70	5 15 6				
ditto.....	86	13 10 0	ditto.....	39	11 11 0				
ditto.....	85	5 8 0	South Crofty.....	63	2 5 0				
ditto.....	78	6 4 6	ditto.....	43	1 6 0				
ditto.....	54	7 12 0	ditto.....	34	2 6 0				
ditto.....	50	3 5 0	Wheal Grenville.....	50	10 10 4				
ditto.....	49	4 15 6	ditto.....	43	7 7 6				
ditto.....	28	4 4 6	ditto.....	32	5 11 0				
ditto.....	22	6 1 6	South Tolgus.....	81	5 2 0				
Consols.....	45	13 2 6	ditto.....	41	9 12 0				
ditto.....	10	3 2 6	Dolcoath.....	39	7 16 0				
Wheal Seton.....	10	3 2 6	ditto.....	37	2 6 0				
Pendarves.....	134	1 7 6	ditto.....	48	6 6 6				
ditto.....	93	5 12 6	South France.....	43	6 10 6				
ditto.....	77	7 6 0	ditto.....	46	5 10 6				
ditto.....	55	7 3 0	ditto.....	20	6 8 0				
ditto.....	51	6 0 0	East Wheal Bassett.....	43	8 2 6				
ditto.....	29	16 2 0	ditto.....	41	7 16 6				
West Seton.....	65	8 1 6	ditto.....	28	7 0 6				
ditto.....	63	4 16 6	Tincroft.....	50	2 17 6				
ditto.....	62	7 2 6	ditto.....	36	7 1 0				
ditto.....	60	8 11 0	West Tolgus.....	68	7 5 6				
ditto.....	57	6 9 0	Condurow.....	38	4 17 6				
ditto.....	62	8 11 6	ditto.....	16	6 5 0				
ditto.....	47	5 10 0	Wheal Vyvyan.....	22	3 15 6				
ditto.....	39	3 1 6	ditto.....	15	6 8 0				
East Pool.....	83	5 5 0	Stray Park.....	25	3 10 4				
ditto.....	71	3 3 6	ditto.....	10	1 1 0				
ditto.....	54	9 0 0	Mayes & Chapple's Ore.....	22	3 6 6				
ditto.....	54	5 9 0	East Grenville.....	22	3 6 6				
ditto.....	54	2 18 6	ditto.....	10	2 0 0				
ditto.....	32	2 2 0	Camborne Vein.....	25	3 14 6				

(ABRIDGED PROSPECTUS.) **TITANIC STEEL AND IRON COMPANY (LIMITED)** Capital £360,000, in 2000 shares of £180 each, of which only 400 will be created, and £16,000 shares of £10 each. Deposit, £1 to be paid on application, and £1 on allotment.

ALEXANDER CLUNES SHERIFF, Esq., Shrub Hill House, Worcester—CHAIRMAN.
JOSEPH WHITWELL PEARSE, Esq., Woodlands, Darlington (Director of the North-Eastern Railway Company)—DEPUTY CHAIRMAN.
WILLIAM AKROYD, Esq., Parkfield, near Stourbridge (Chairman of the Stourbridge Railway Company).
N. HARTLAND, Esq., The Oaklands, near Cheltenham (Director of the Gloucestershire Banking Company).
GEORGE LEEHAN, Esq., York (Deputy-Chairman of the North-Eastern Railway Company).
HENRY PEARSE, Esq., M.P., Pierremont, Darlington (Director of the North-Eastern Railway Company).
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JOHN PARSON, Esq., Ham Common, Surrey (Director of the Great Western Railway Company).
ISAAC WILSON, Esq., Nunthorpe Hall, Middlebro'-on-Tees (Director of the North-Eastern Railway Company).

BANKERS.
 Messrs. William Deacon and Co., London.
 The Worcester City and County Bank, Worcester, and at all its branches.
 The Gloucestershire Banking Company, Cheltenham, and at all its branches.
 Messrs. Stuckey's Banking Company, Bristol.
 The Birmingham Banking Company, Birmingham.

BROKERS.
 G. W. Shirreff, Esq., 4, Bank-chambers, Lombard, London, E.C.
 James Shepherd, Esq., Auctioneer, 4, Bartholomew-lane, London, E.C.
 W. T. Adcock, Esq., 14, Foregate-street, Worcester.

SOLICITORS. Messrs. Burchell, 5, Broad Sanctuary, Westminster.
ENGINEERS. Robert Charles May, Esq., C.E., Great George-street, Westminster.
GENERAL FINANCIAL MANAGER AND SECRETARY.
 F. Dixon Hartland, Esq., The Oaklands, near Cheltenham.
MANAGER OF MANUFACTURING DEPARTMENT.
 R. Musket, Esq.

TEMPORARY OFFICES.—BELGRAVE HOUSE, CHELTENHAM.

The company has been formed for the purpose of working (and granting licences to use) the processes for improvement in the manufacture of steel and iron invented by Mr. Robert Musket, of Coleford, Gloucestershire.

These improvements are all protected by letters patent (now the property of the company), and are being extensively used at the works at Coleford, which the company purchased from Messrs. Musket and Co., and upon which they have expended, and are still expending, a considerable sum in improving and adapting them to the increasing business of the company.

The quantity of steel now consumed in England is very large, and is daily increasing, in consequence of the use of that material for railway tyres, rails, points, crossings, and other purposes to which it has not hitherto been applied to any considerable extent in consequence of its great cost.

The processes of Mr. Musket, especially when in combination with the Bessemer process, will produce, from materials which will cost about £3 per ton, steel in no way inferior to that produced from the best Swedish iron.

For the letters patent, the goodwill of the business, &c., Messrs. Musket and Co. have agreed to accept paid-up shares; and such confidence have the patentees in the success of the company, that they have agreed that the shares so accepted by them shall not be entitled to any dividend except when the other shares receive dividends at the rate of £3 per cent. per annum, after which they will receive all the surplus up to £5 per cent. on their shares, any further surplus being divided equally.

The company is already registered with limited liability, and has been gradually getting into operation for rather more than a year. The accounts for the last half-year, now being made up, will show that, notwithstanding the unfinished state of the works, sufficient has been earned (exclusive of royalties receivable by the company) during that period to pay a dividend at the rate of 6 per cent. per annum upon the proprietors' shares. The directors and their friends have subscribed for and paid upon all the two hundred £100 shares available for the public, and upon three thousand of the £10 shares, making a total subscription of £250,000, and have thus, as well as by having borne all the risk and labour consequent on the formation of the company, and the first getting it into operation, given the very best proof of their confidence in the undertaking. They desire now to extend its basis and enlarge its operations, and with that view they offer the remaining five thousand £10 shares to the public, for which application must be made in the form annexed to the prospectus, either to the secretary, bankers, or brokers of the company.

The Articles of Association, and the reports of the engineers consulted by the directors, can be seen at the offices of the company, or at the brokers.

A deposit of £1 per share must be made with the company's bankers on application (which will be returned in the proportion in which any shares so applied for shall not be allotted), and a further £1 per share on allotment.

TITANIC STEEL AND IRON COMPANY (LIMITED).—Notice is hereby given, that the LIST OF APPLICATIONS FOR SHARES in this company will be CLOSED on SATURDAY, the 13th February, for LONDON, and on MONDAY, the 15th February, for the COUNTRY, after which latter date the directors will proceed immediately to allot the shares.

Belgrave House, Cheltenham, February 3, 1864. By order.

QUELLYN SLATE QUARRY COMPANY (LIMITED).—WORKS, CARNARVON, NORTH WALES. Capital £20,000, in 4000 shares of £5 each. Deposit, 10s. per share on application, and 10s. on allotment.

Calls, £1 per share, at not less intervals than three months. Incorporated under the Joint-Stock Companies Act of 1862, limiting the liability of each shareholder to the amount of the shares allotted to him.

First issue, £12,000. No less number than five shares will be allotted.

DIRECTORS.
 Mr. WILLIAM GARFORTH, Halifax. Mr. BENJAMIN WALKER, Halifax.
 Mr. ALFRED BANCROFT, Halifax. Mr. RICHARD SPENCER, Halifax.
 Mr. JAMES BAIRSTOW, Halifax. Mr. JAMES HIRST, Halifax.
 Mr. SAMUEL WIMPENNY, Holmfirth.

BANKERS.—The Halifax Joint-Stock Banking Company.
SOLICITOR.—John Edwards Hill, Esq., Halifax.
MANAGER.—Mr. John Lloyd, Surveyor, Carnarvon.
SECRETARY.—Mr. John Clay, Accountant, Halifax.

OFFICE.—20, COW GREEN, HALIFAX.

This company is formed for working a slate quarry about eight miles from Carnarvon. The quarry has been opened, and proved to contain slate of a very superior quality. The lease is for 30 years, renewable for 30 years. More than one-third of the shares are already applied for, therefore an early application is necessary.

Samples of the slate from the quarry may be seen at the office, and also plans and sections of the quarry.

Prospectuses and forms of application for shares may be had on application to the secretary.

CENTRAL GRYLLS MINING COMPANY (LIMITED).—Incorporated under the Companies Act, 1862. Capital £20,000, in 2000 shares of £10 each. Deposit, £1 per share on application, and £1 10s. per share on allotment.

DIRECTORS.
 FAITHFUL COOKSON, Esq. (Messrs. Faithful Cookson and Co.)
 CHAS. D. HAFENDEN, Esq., 59, Lansdowne-road North, W.
 EDWARD S. HARDING, Esq., 1, Great Winchester-street, E.C.
 JOHN HAFENDEN, Jun., Esq., Director South Grylls Mining Company.
 EDWARD PITMAN, Esq., 2, Leobury-road, Brixton, W.
 ERNEST G. FELLOWES, Esq., Sarbiton, Surrey.

BANKERS.—The English and Irish Bank, 25, Foultry, E.C.
AUDITOR.—Alfred Whitworth, Esq., Accountant, Manchester.
SECRETARY AND OFFICES.—Mr. Henry Rhodes, 95, Gracechurch-street, E.C.

PROSPECTUS.
 This company having purchased the lease of a mineral property of great value, situated in the parish of St. Hilary, about three miles from Marazion, in the county of Cornwall, and in the set now so successfully worked by the Wheal Grylls Company, proposes to thoroughly develop it. The property is within a short distance of the Wheal Grylls Company's workings on the Georgia lode, which has proved so productive and profitable.

The Georgia lode runs through this property, and it can be opened upon at a moderate cost, when it will doubtless give sufficient returns to place the shares of this company on a proportionate equality in value with those of the Wheal Grylls Company, which, with £2 4s. per share paid, are now at about £27 per share.

The description of tin produced from the Georgia lode is the best black, and commands a high price in the market.

The company have secured a lease of the property for a period of 21 years, at the moderate royalty of 1-15th on all ore raised and sold.

Until the present lease has been granted of this property, the owner of the land declining to have the surface interfered with; but his decease has removed the difficulty heretofore existing, and the present lease has been granted by his trustees for 21 years.

The directors are prepared to receive applications for a limited number of shares, but no application will be considered unless it is accompanied either by the bankers' receipt, or a remittance for the amount of the deposit of £1 per share on the number of shares applied for.

Prospectuses, with report, forms of application for shares, and all further information, may be obtained on application at the offices of the company, or from the bankers.

Where no allotment is made, the deposit will be returned in full.

Report from Capt. J. Richards, Agent at the South Grylls Mine.
 Dec. 26, 1863. This mining property, known by the name of Ingewildens, is situated in the parish of St. Hilary, in the county of Cornwall, in the midst of mines which have produced large quantities of mineral and profits to the adventurers. It is surrounded by the Wheal Grylls set, and the rich Georgia lode, now so productive and profitable in that mine, runs through this land. I believe Wheal Grylls present works on the Georgia lode are within about 100 fms. of this set. There are some ancient workings in this property on the Georgia lode, and from the appearance and accounts given it must have yielded a large quantity of tin. The operations were not carried very deep, the water preventing them, and when again worked there is a good reason to believe it will prove a rich lode, as in the adjoining mine it has proved one of the richest lodes ever worked in the county. The lode can be opened on at a very moderate expense, and as the results would be of so important a character I strongly recommend this being done without any delay. It is stated that the ancients reported a fine copper lode to exist also in this property, of which I can see no signs at surface, but from information I have received I have good reason to believe that this is the case. It could be proved for a very small amount of money, which I recommend doing, and should it prove as stated a valuable mine will at once be laid open. If this said copper lode was ever opened on by old miners the signs at surface are removed on account of the land being brought into the state of cultivation, which is very likely to be the case. The position of this property is highly favourable, there being many thousand pounds profit realized on both sides of it, and has the same channel of ground and lode running through it. I recommend your opening it yourself, as I feel convinced you must obtain large returns.

JOSEPH RICHARDS.

SCHIELE'S PATENT SILENT FANS. SCHIELE'S PATENT TURBINE WATER WHEELS. PLATT AND SCHIELE'S PATENT SILENT FANS. SCHIELE'S PATENT BLAST ENGINES. SCHIELE'S PATENT VENTILATORS FOR SHIPS. PLATT AND SCHIELE'S PATENT MINE VENTILATORS. SCHIELE'S PATENT AIR PUMPS OR GAS EXHAUSTERS. SCHIELE'S PATENT GOVERNORS. PLATT AND SCHIELE'S PATENT COMPOUND FANS. SCHIELE'S PATENT COMPOUND BLAST ENGINES.

Notice is hereby given, that the NORTH MOOR FOUNDRY COMPANY, OLDHAM, have the SOLE and EXCLUSIVE RIGHT to MANUFACTURE and SELL the MACHINES KNOWN and USED UNDER the ABOVE NAMES.
 Mr. SCHIELE has NO INTEREST whatever in the ABOVE INVENTIONS, having ABSOLUTELY ASSIGNED the SAME to MARTIN SCHUNCK, Esq., by a deed dated 14th July, 1863, executed pursuant to an order of the Lancashire Court of Chancery.

Every attempt to use the above machines (unless purchased from the North Moor Foundry Company), whether under alleged "new patents," "latest patents," or "patents of 1863," or any other similar ad captivandum title, will, immediately on its becoming known, be made the subject of legal proceedings.
 LEWIS, DARRISHIRE, AND ASHWORTH, Solicitors,
 21, Brown-street, Manchester.

WATSON AND CUELL'S MINING CIRCULAR.
 published every Thursday morning, price 6d. or £1 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON F.G.S., and published by WATSON AND CUELL, 1, St. Michael's-alley, Cornhill.

N.B. Messrs. WATSON AND CUELL have made a selection of a few dividend and progressive mines, which they have reason to believe will pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application.

STATISTICS OF AND OBSERVATIONS UPON THE MINES OF CORNWALL AND DEVON.
 For 1861, 1862, and 1863.

By THOMAS SPARGO, Mining Engineer, Stock and Sharebroker,
 Gresham House, Old Broad-street, London, E.C.

The work contains the following particulars, viz.—The geological position, present prospects, name of purser, manager and secretary, with annual returns of each mine during the last three years, and total dividends paid to the present time.

It is illustrated by a map of Cornwall, showing its parliamentary division, and population; geological district maps, divided into four sections, in which are shown the boundary lines of each parish, height of hills, source of rivers, &c., together with maps of St. Just, St. Ives, Marazion, Gwincar, Chiverton, Bodmin, Liskeard, Devon Great Consols, and Tavistock mining districts, showing boundary lines of each set, with the lodes, veins, and cross-courses traversing the same. It also contains longitudinal and transverse sections of the Dolcoath Mine (kindly supplied by Capt. Charles Thomas), with report upon the same; sections of the workings at Botallack, corrected down to the present time by the manager (S. H. James, Esq.), with historical account of same; surface plans and sections of all the leading mines in both counties, with observations upon each, including geological map of the Fowey Consols district (kindly furnished by Major Davis, R.M.), as also all the information necessary for the guidance of those unacquainted with mining.

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HISTORY OF THE RISE AND PROGRESS OF MINING IN DEVONSHIRE.
 From the time of the Phenicians to the present.
 By G. CHOWEN.

London: Published at the MINING JOURNAL OFFICE, 26, Fleet-street, E.C.

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 By RALPH MOORE, Mining Engineer.

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Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly Aided on receipt: it then forms an accumulating useful work of reference.

MUNDIC TRADE.—Observing in the Notices to Correspondents of last week's Journal the request of a subscriber to be furnished with a complete list of all the lead smelting works in Great Britain, I am encouraged to make a somewhat similar enquiry as regards muddle. I should feel that a great favour was conferred if any of your correspondents would kindly trouble himself to furnish a complete list of all the buyers and consumers of muddle in Great Britain and elsewhere, at the same time stating for what purposes that mineral is used, the present several sources of supply, the prices per ton given for the various qualities, and the terms of sale. This information would not only prove very interesting generally, but at the same time particularly acceptable.

PETROLEUM SAFETY LAMPS.—Some few weeks since you referred to Mr. Leve Evans having invented an improved safety-lamp for burning petroleum oil. The lamp appears to me to be much like an ordinary paraffin night-lamp; and as this gives considerably more light than an ordinary full-sized candle, it would be a desirable substitute for the lamp ordinarily used in a Davy. For certainly not more than 4s., a lamp existing, Davy's and Stephenson's, could be altered to burn the mineral oil, and the collier could thus have three times the light at less cost, with less heat, and even increased safety.—G. J. C.

THE DIPHTHUS CARSON SLATE COMPANY.—We are requested to state that in our report of the meeting, in the Journal of Jan. 23, Mr. A. Dillon was made to say "that the old proprietors, in utter ignorance of the principles of working the quarry," &c.; whereas, what he really did say was, "that the old proprietors, in ignorance of the extent of the slate rock, heaped up an enormous quantity of rubbish on the parts that have since been discovered to be valuable rock; but that, if there were ten times as much, it would pay to remove it."

MINE SHARE-DEALING.—Having bought, for the account before last, shares in East Wheel Russell of two parties, I received some days since, signed and duly stamped, transfers, the which, on presentation, I found to be worthless, neither of the parties having a single share on the books in either of their names. One of them also had given a previous transfer. If this is, as I shrewdly suspect, a mal-practice, and which, I fear, is too general, I ask the favour not only of an exposure in the Journal, but also to bring it under the notice of the committee of the Mining Exchange.—SILEX.

THE MINING JOURNAL Railway and Commercial Gazette.

LONDON, FEBRUARY 6, 1864.

Although formerly the simple statement that the Bank minimum rate for money was 8 per cent. would have been regarded as equivalent to declaring that speculative and industrial enterprise was in a lamentably depressed condition, circumstances have, happily, so completely changed, that at the present time capitalists are enabled calmly to watch the increase and diminution of the pressure applied by the Bank directors, and to comprehend that changes in the price of money, when made with the judgment almost invariably exercised in Threadneedle-street, act only as a regulator, without in any appreciable degree affecting injuriously the machinery to which it is applied. Capitalists now thoroughly recognise the fact that the occurrence of certain events renders it more desirable that money should stand at 8 per cent. than at 4 per cent.; and that when the Bank rate is suited to the circumstances of the day, the general business affairs of the country go on quite as smoothly and profitably with a high rate as with a low one. But this is not all. The development of the joint-stock principle has permitted profits so enormously high, as compared with ancient notions, that speculators can now better afford to pay even 10 per cent. for monetary accommodation than a few years since they could have afforded 5 per cent. When it was considered something extraordinary for a public undertaking to earn 10 per cent. per annum, it can readily be believed that the minimum Bank rate being more than about 4 per cent., all speculation would be stopped, and a period of depression would prevail. Capitalists are now learning to look upon 10 per cent. as an amount of dividend generally to be expected, whilst 20 per cent. at least must be earned for them, or they seem scarcely inclined to give directors the usual complimentary vote of thanks.

At the present moment an extraordinary amount of public attention is directed to the several financial associations which have within the past few months been introduced to the notice of capitalists, and no one would attempt to deny they are a highly desirable channel for investment; indeed, the enormous profits which they have earned is alone sufficient evidence in their favour. It has been proved beyond dispute that upon the capital employed by these undertakings profits varying from 18½ per cent. per annum to 73 per cent. per annum have been earned, and the directors of the unfortunate (?) association which earned only 18½ per cent., absolutely apologise for being unable to show a more favourable result, and give ample explanations to prove that it was only owing to most unusual difficulties, not likely to occur again, that this percentage of profit was not much exceeded. Now, the announcement of such facts, and the declaration of the dividends available for distribution as a dividend of so much per cent. per annum, has startled—and very satisfactorily startled—capitalists to the fact that joint-stock enterprise is not amongst the least profitable channels for the investment of their spare funds.

But large as have been the profits of financial associations, it would not be difficult to show that in mines profits are both earned and paid at so far higher a percentage rate, that any increased risk, real or supposed, connected with mining operations is far more than compensated for. The fact of dividends on mine shares being distributed, as a rule, two-monthly, and at so much per share instead of so much per cent., leads mine adventurers to receive 20, 30, 50, or even 150 per cent. per annum, without noticing it as extraordinary, and we could mention a great number of mines, which have long since ceased to be in any degree speculative, returning, regularly and continuously, dividends which would bear no unfavourable comparison even with the immensely profitable financial associations. We will subjoin a list of 20 mines which actually distribute to the shareholders dividends averaging 40½ per cent. per annum upon the outlay made in the development of the mines, a percentage with which surely all reasonable speculators will be well satisfied. We will not include in this list the exceptional rich mines which have returned over 100 per cent. per annum, for it must be acknowledged that it would be presenting mining enterprise in too glowing colours to give as an average of the whole the annual profit of such undertakings as Wheal Grylls, where over 136 per cent. per annum was paid as dividends in 1863; as Lisburne Mines, which gave more than 128 per cent. per annum; Minera, 116; East Caradon, 121; Polberro, 133; East Pool, 125; South Caradon, 236; and Devon Great Consols, 5500 per cent. per annum, although such mines would doubtless have to be included were a general statement of the profits of mines required to be prepared. The present purpose will be best answered, however, by taking only some of those mines not usually alluded to as being extraordinarily profitable, as by that means the objection that only the most productive mines have been selected cannot be urged. Many of the mines contained in the subjoined list are comparatively little sought after by capitalists, the majority of whom have not troubled themselves to calculate the profits returned by them:—

Name of mine.	Capital paid up per share.	Dividend paid per share, 1863.	Profit per cent. on outlay.
Botallack	£91 5 0	£24 7 0	26½
Cargill	14 15 7	5 0 0	34½
Cwm Erdd	7 10 0	2 5 0	35
Cwmystwith	60 0 0	20 0 0	33½
Dolcoath	128 17 6	47 0 0	36½
East Basset	29 10 0	10 0 0	33½
East Darren	32 0 0	11 0 0	34½
Herodsfoot	8 10 0	5 5 0	61½
North Trekerby	1 9 0	6 7 6	24½
South Frances	18 18 9	6 6 0	32½
St. Ives Consols	8 0 0	2 17 6	35½
Tincroft	9 0 0	2 10 0	27½
West Basset	1 10 0	1 7 0	90
West Seton	47 0 0	29 0 0	61½
Wheal Basset	5 2 6	4 0 0	78
Wheal Basset & Grylls	7 0 0	3 0 0	42½
Wheal Kitty (Lellan)	2 0 0	0 10 0	25
Wheal Owles	70 0 0	22 10 0	32
Wheal Trelawny	5 10 0	2 2 6	38½

In calculating the annual percentage, fractions less than eighths of a pound have been omitted, the actual percentage being in all cases either the same or above that shown in the table; and we have no hesitation in saying that there is no class of commercial business where a selection of twenty second-class companies engaged in it (for the financial associations must rather be classed with the exceptionally profitable mines not contained in the table) could be made which would show equally profitable results. Let capitalists, then, give the financial associations all the credit for making large profits to which they were entitled, but let them well understand that carefully-selected mines are fully able to hold their own against them, and that the prospects of mines and of the metal trades generally were never in a more healthy and prosperous condition than at present.

Some short time since we had occasion to refer to a Canadian iron tract, reported to be easily workable, and of "great value and importance." It now appears that a company is about to be formed in this country for the development of the mineral property in question, and, if we are rightly informed, there will be no lack of those two great requirements—capital and experience—in carrying out the project promptly and effectively. At the present time there is a special interest attached to Canada in a political and social point of view, inasmuch as her status under the British Crown exhibits a contrast of peace, order, and industry to that unfortunate disorganisation and anarchy which reign beyond her frontier in what were once, the United States, and this constitutes a guarantee for the safety of capital invested of the very first consequence. It is from no invidious spirit that a reference to such opposites emanates: in common with the right-minded in this and every other civilised country, we deplore the internecine war now wasting the energies of a people that only a few years since aspired to the highest destinies, and were held to be in the van of commercial progress; but it would be manifest injustice not to recognise with free, frank, and earnest appreciation that internal tranquility, industrial application, and general prosperity enjoyed by Canada, circumstances which must ensure at the very outset confidence in enterprises founded here in England for acting upon her resources.

Recently a special correspondent, who journeyed from New York to

Montreal, described how forcibly he was struck by the marked difference existing between the Canadians and the Americans, both Federals and Confederates; nor did he fail to express his surprise that, in reality, so little is known amongst the good people at home of their colonial relations. The farther the distance the closer the tie, would seem to apply to the loyalty of Canada in a very eminent degree, for the popular sympathies are truly and enthusiastically British. And this, we repeat, is not the least attractive merit by which all who are willing to enter upon colonial projects, should be influenced. Those tendencies incline to and give association stability; and it is evident that industrial intercourse, of which there cannot be a better type than mining, for it is ever extending its sphere, and creating new issues of commerce and manufacture, will still further improve those kindly, elevating susceptibilities, and through a union of industry, consolidate the interests of all engaged in it. A great advantage, then, is apparent in the certainty that, whatever combination of a speculative nature is formed in this country for mine-working in Canada, the projects will not be launched in a region foreign to English principles, habits of thought and action, mutuality of consideration, and business fair-play, by which so much of our common weal has been, and ever will be, effected.

Iron, vast as has hitherto been its uses, is day after day increasing its application and extending its range of utility. Its future into steel bids fair to engage in its still greater improvement all the science and ability which can be mustered, for it being now so largely introduced into the construction of projectiles, missiles, shield-armour, and so forth, it will inevitably be tested in various other departments of what may be termed the science defensive and offensive of modern times, while for such purposes there will be demanded perfection and modifications which will, doubtless, be indicated by the incidents of requirement; and all these must in their turn give an impetus to the exploration of iron mines, and enhance the value of the best material. In Canada East a mineral property of this character is reported, and some tons of the ore have been brought to London, with the intent of putting its qualities to the proof upon a large scale. For conversion into steel of a peculiarly fine description it is said to be thoroughly adaptable, but of this it would be premature to speak definitely. A report upon it will be, it is understood, published in due time.

An analysis of the ore shows very favourable to such an estimate, and as it is asserted to be cheaply procurable, and that the concession is conveniently placed, of large extent, and granted in perpetuity, the interest to its possessors seems apparent. However, it is not our province to enter upon such speculative details. The subject is touched upon the general principle of encouraging legitimate mining enterprise in the colonies, particularly one like Canada, where the regard for constitutional government is so marked, the order of the community so firmly established, and industry and commerce the basis of public prosperity.

In another column of this day's Journal we give a report of the proceedings at the meeting of the South Wales Institute of Engineers, which will be read with much interest by all connected with the Principality, for it will be seen from the President's inaugural address that the suggestion recently made in the MINING JOURNAL, that the operations of the Institute should be extended to metalliferous as well as coal mines, has been willingly adopted, the President expressing the wish that gentlemen who have had experience in the working of some of the lead and other metal mines in South Wales would favour them with a paper. Another important point to which allusion was made in the address was the award of prizes and distinctions for papers which the Council consider to be of sufficient merit—a course which, we fully agree with the President, would create a wholesome ambition and competition on the part of the members.

COAL-CUTTING MACHINERY.—A bill in Chancery was filed on Jan. 30, by Messrs. Firth, Donisthorpe, and Bower, of the West Ardsley Colliery, Leeds, against Messrs. Ridley and Jones, the patentees of the alleged improvements upon the invention of the said Ridley, previously assigned to the plaintiffs. Messrs. Ridley and Rothery obtained provisional protection for an invention on March 30, 1861, and before the patent was completed (on June 27, 1861), entered into an agreement, of which the following is an abstract:—1. The patent for coal-getting, obtained in names of Ridley and Rothery, when completed, to be transferred to Mr. G. E. Donisthorpe (on behalf of Donisthorpe and Firth).—2. All expenses then already disbursed by Ridley and Rothery, and also accounts yet remaining unpaid, not exceeding £500, to be paid by Donisthorpe and Firth, and also all further expenses in obtaining the patent.—3. Future improvements or patents for coal working, invented or patented by Donisthorpe, Ridley, Rothery, or Firth, to become the property of the said G. E. Donisthorpe; and in consideration of these arrangements he is to pay to Ridley 15 per cent., and to Rothery 5 per cent. of all profits which he may make out of the said patent or patents or future improvements, in addition to the wages or salary of 3l. net per week to said Ridley.—4. Profits on foreign patents to be also liable to the 15 and 5 per cent. respectively.—5. Ridley to give the whole of his time, and follow in all cases Donisthorpe's instructions.—6. No charge to be made on the West Ardsley Company for the use of the machines, but such company to have free use of the patent machines on payment of cost of manufacture.—7. Ridley and Rothery to be exempt from all expenses and losses in obtaining and defending patents. The memorandum of agreement referred to above has been registered in the register of proprietors, kept at the Great Seal Patent Office, pursuant to the Act. Improvements on the original patent were patented by Donisthorpe, Firth, and Ridley, in November, 1861. On May 29, 1863, Ridley abruptly left the service of the plaintiffs, of his own accord, and without giving any warning. On June 8, 1863, a patent was obtained by James Graffon Jones and Robert Ridley, for an invention of a coal-cutting machine, differing from the West Ardsley machine in the form of the cylinder—the West Ardsley machine having an ordinary high-pressure cylinder, and Ridley and Jones's improvement a trunk-engine cylinder. The prayer of the bill is:—1. To compel Ridley to specifically perform the agreement of June 27, 1861.—2. To compel Ridley to assign to Donisthorpe or the plaintiffs (subject to the said agreement) all his share and interest in the patents of Ridley and Rothery, Donisthorpe, Firth, and Ridley, and Jones and Ridley.—3. That Ridley may be declared a trustee for Donisthorpe.—4. That Ridley and Jones be restrained by injunction from using the patents of 1861, without Donisthorpe's license.—5. That the machine exhibited at Middleton's yard, Southwark, and all other machines made or in the power of Ridley and Jones, be handed over to the plaintiffs.—6 and 7. That damages and costs be assessed against Ridley and Jones.—8. That the plaintiffs may have such further relief as may seem fit.

TAMAR, KIT HILL, AND CALLINGTON RAILWAY.—This project passed unopposed before the Examiner on Standing Orders on Wednesday last. All the requirements of Parliament had been most accurately complied with, so that the necessary evidence was furnished without the slightest break. This is essentially a mineral line in a most important mining district, and must be a great advantage to the numerous undertakings in the neighbourhood; it is seven and a quarter miles long. About five miles of the land has already been purchased, and about three miles of the line is ready for the rails. It will be opened for general traffic, it is expected, about the beginning of September.

THE WEST CLIFFORD UNITED TIN AND COPPER MINING COMPANY.—The prospectus of this undertaking, which appears in the Journal of this day, cannot fail to command attention, as possessing very attractive advantages, verified and supported by parties largely interested in many of the surrounding rich and profitable mines, and who are not likely to be found borrowing where metal is not to be found or lodes to be traced. The West Clifford embraces four distinct sets—the Ting Tang, West Ting Tang, South Ting Tang, and Wheel Moyle, all in the Gwennap district, the richest in the county of Cornwall, where the fortunate adventurers have counted their profits by millions. A perusal of the reports in the prospectus, all from practical men of much experience, will show that a large amount of work, of great value to the present company, has been done; that the mine is opened down to 140 fms., nearly reaching that point where the greatest riches have been made by the mines in the locality—from 150 to 250 fms.; it will also be found that all the reports agree in this, that the lodes of the Clifford Amalgamated (now the richest mine in the district) run direct through the West Clifford property; these facts give a certain value to this undertaking. But there is another feature in the concern which should be noticed, because the principle has been advocated for years, that a part of the directors in mining companies should be Cornishmen, resident in the locality. Now, it so happens that four of the directors of the West Clifford Company are gentlemen in the county of the highest standing, all con-

nected with mining; this, therefore, may be considered an additional guarantee for a sound and judicious management. The capital of the company is very ample—30,000l., in 6000 shares, of 5l. each.

FOREIGN MINING AND METALLURGY.

A few data with respect to the present position and prospects of the coal basin of the Ruhr may not be unacceptable. The basin extends from the Rhine to the Ruhr, passing by the districts of Duisburg, Essen, Bochum, and Dortmund. The basin, which was unknown—or, at any rate, ignored—15 or 20 years since, is now worked to a great extent. Up to 1853, the basin, deprived of the means of communication so indispensably necessary for stimulating the working of a coal bearing, was obliged to reduce its extraction to the mediocre quantities necessary to meet the wants of domestic consumption in immediately contiguous districts, while a timid export trade was attempted to Holland. Nevertheless, notwithstanding these disadvantages, which exercised to some extent a paralyzing influence, the extraction constantly increased. Thus, while in 1851 it amounted to 166,560 tons, in 1852 it had risen to 195,520 tons. The year 1853 was the commencement of a new era for the basin, in consequence of the opening of direct railway communication between Paris and Berlin. From that date there began to rise on all sides in the district blast-furnaces, forges, glass-works, steam-engine manufactories, and industrial establishments of all kinds, so that the extraction of coal acquired a development which has not ceased to increase from year to year. Thus while in 1852 the amount raised was 195,520 tons, it had increased in 1854 to 271,560 tons, and in 1855 to 348,590 tons. It may be helpful to recall the progress in the production will be still constant and continue as the situation of the basin assures its products outlets of a great and valuable extent. Placed in the centre of Europe, and endowed now with economic means of transport, the basin can, over an immense extent, defy the competition of the coal of any other locality; in fact, of late Ruhr coal has been seen at Gand in competition with Belgian, and at Calais in antagonism with English. The conditions of extraction are also very favourable. The whole of the beds in the basin form a thickness of more than 140 ft. of coal, of an altogether special quality for gas and coking purposes; and it is obvious that this immense mass of mineral could meet the requirements of a very large demand for an almost indefinite period. The power of the Ruhr beds is, on an average, 4 ft. 8 in. to 6 ft. 8 in., but they sometimes extend to 10 ft. and 13 ft. in thickness. The coal is generally only sufficiently pure to be classed as *maun*, which serves for the fabrication of coke. Beds of 2 ft. to 2 ft. 8 in. in thickness, or even 3 ft. 4 in., which in Belgium and the North of France are considered very fine workings, are objects of disdain in the basin of the Ruhr, forming a reserve for the future,—a future which appears very distant, having regard to the richness of the basin. In Belgium the working is conducted in pits sunk in some cases to a depth of 2870 ft., while in the basin of the Ruhr the maximum depth of the pits is only 800 ft.

The suppression of any condition as to a guarantee is now a clause frequently insisted on in Belgium in contracts for rails. This is a custom, in fact, which tends to become general, and the matter is an important one in connection with contracts concluded on foreign account, as producers were formerly exposed to the risk of seeing their rails rejected in distant districts, often for very slight defects. Hopes are entertained that a guarantee clause will in the end completely disappear from contracts. Several new contracts concluded with England, and amongst others by M. de Dorlodot Frères, have suppressed all guarantee as to time of delivery. The ironworks and the managers are also occupied with the construction of additional puddling-furnaces, &c. The establishment of works for the production of rough iron is announced at Jemeppe. The Conilliet Company has decided on increasing its rolling-mills, which are already on a vast scale; and the construction of five new puddling-furnaces, four re-heating furnaces, a pile-hammer, &c., has been commenced. The Marcinelle blast furnace will be soon re-lighted, its new management being M. Cornil et Cie. The Châtelineau Company and M. de Dorlodot have taken similar resolutions to extend their productive powers. We have announced recently the setting in train of a rolling-mill constructed by a new firm, M. M. Victor Gilleux et Cie; this establishment will produce specially plates and angle irons, &c. for bridges. The works, which have been fitted up with tools in a very elaborate and complete manner, are expected to introduce some improvements in the fabrication of plates for boilers. The works will also apply themselves to the fabrication of plates for ships; this is a branch of siderurgy which must evidently develop itself at a time when efforts are being everywhere made to replace wood by iron in naval constructions. A meeting of firms engaged in small forging operations just held at Charleroi, has decided on the maintenance for the time of present quotations, in order that a rise may be secured shortly. This opinion only prevailed after various observations from some industrialists, who wished to reduce sale prices at a time when raw materials must be obtained at higher rates! It is clear that these firms should endeavour, a some few of them only do, to extend their sale radius, which is now restricted to Belgium, and to a few timid export operations.—In a word, they must frankly open the international market. The syndicate of works has concluded a fresh contract for rails of a certain importance for the moment transactions in Belgium, the price of which is maintained, nevertheless, 104l. The copper of the Society of Commerce has been done in at 61 sh. at this quotation there still remained sellers. In consequence of the rise in the price of the various qualities of copper has generally risen at Hamburg; supplies are nearly exhausted, and it is now only possible to obtain copper derived from fundries in the town. The Berlin and Cologne markets have been regular, and previous rates have been firmly maintained. Banca remains quiet, and without much business, at Amsterdam and Rotterdam, at 72 sh. At Paris tin is less sought after, but at the same time previous prices are maintained. Banca was quoted at 128l.; Detroit, 126l.; and English, 120l. There has been no change at Berlin and Cologne, where the article enjoys a good demand for consumption. Tin is firmly held at Hamburg, but there has not been much business done in it. Lead has been in good demand at Paris, and the price of rough Spanish has been raised from 21l. 14s. to 22l. 4s. and 22l. 8s. per ton, while French has also brought 22l. 8s. per ton. There is no great demand for the moment for lead at Hamburg, but the article remains in a good position, in consequence of the absence of stock. Berlin has been very firm; holders maintain their pretensions, and will not concede anything below the present established prices. Forward rates have also been supported at Cologne. Rough Silvan zinc has displayed an upward tendency at Paris, and is quoted at 22l. while rolled zinc of the Vieille-Montagne Company has made 23l. at the same capital. Affairs have been almost nil at Hamburg, and prices appear to be the turn in favour of buyers. The demand has fallen off at Breslau, but a notable part of the production up to the end of February being already sold, holders are very firm.

The situation of the French iron market remains, on the whole, unaltered. Transactions in pig, however, which previously were very quiet, have become more animated of late. Some considerable affairs have been carried through, the price of 44. 16s. per ton has been abandoned by sellers at St. Dizier, and business cannot now be done at less than 5l. per ton. It is remarked that only certain buyers have participated in recent transactions, the others holding aloof. The market for iron is less active. The works have their fabrication disposable, but no important stock exists at present; and a good commencement of the year is hoped for, even on the confession of those who consider the iron trade of France scarcely able to sustain itself. A letter just addressed to the Minister of Agriculture, Commerce, and Public Works, by the committee of coal-owners in the Pas-de-Calais, states, amongst other matters, that the coal-beds of the Loire now yield annually 2,400,000 tons per annum, while after only a few years' work the production of the basin of the Pas-de-Calais already nearly attains half this total, and is acquiring every day a further development. A discussion of some interest has been carried on of late with reference to the present position of French metallurgy. The *Revue de Charleroi* sums up matters as follows:—“We have already said that the journals which occupy themselves specially with the interests of metallurgy in France show themselves very uneasy at the fact that it does not participate in common with Belgian and English siderurgy in the marked revival which has declared itself for some months in Belgium and England, and they attribute this fact to the reduction of Customs duties involved by the recent Treaties of Commerce. We have intimated on this subject to the *Journal des Mines* that we cannot share its opinion, and that the cause of the evil of which it complains does not proceed from a Customs' reduction. Our words have not had the good fortune entirely to convince the French Journal; nevertheless, it seems to us that they have thrown some doubt into the minds of its director, as it at least no longer asks for the restoration of the old protective tariff as a means of saving French metallurgy, but calls upon the French Government for an application of economic measures capable of lightening the burdens and ameliorating the conditions of French industry. One observation which we have to make to the *Journal des Mines* is, that we heard Belgian forge-masters complain at least as loudly when the first reforms were introduced into our Customs' tariff. It was then contended that Belgian forging industry would become the prey of England. All these apprehensions have been dissipated little by little in Belgium, but now the same event produces the same impression in the minds of French industrialists; we believe the fears entertained by them are no better founded than were those cherished by our own countrymen.”

We may group together one or two other matters of interest. The Niederfischbach Mines and Foundries Company returns its production for the fourth quarter of 1863 as follows:—Mines: Concordia, plomiferous minerals, 290 tons; Zeuss, ditto, 741 tons; Wustseifen, ditto, 646 tons; Fischbacherwerth, ditto, 84 tons; Rother-Adler, iron minerals and copper pyrites, 321 tons; Obersteakretz, ditto, 79 tons; total, 2130 tons. In the reduction furnace of the lead and silver works the administration obtained during the quarter 363 tons of lead, and the process of desilverization furnished to commerce 800 tons of refined lead, 39 tons of refined litharge, and 467 ton of fine silver. The Belgian Government, by a decree dated Jan. 21, 1864, has approved the statutes of the Société Anonyme Houillière de Santa Ana, the principal object of which is the working of a powerful coal deposit near Oviedo, in the Asturias (Spain). The company is also authorised to undertake everything relating to iron industry (the district presenting important bearings of ironstone), as well as the construction of railway plant. Before issuing the recent decree the Belgian Government instructed one of its states of engineers of mines to report on the reality and importance of the coal beds with which the company proposes to deal; and that gentleman, in his report, states that the principal mines belonging to the new undertaking are those designated under the names of Juliana, Santa Ana, Prisionera, Ade-

laida, Casana, Yuelta, Soton Sallosa, and Góndola; while there are, besides, several others which are only known by works of little extent, but the importance of which cannot be denied. “The union of all these mines,” adds the report, “constitutes a certain mineral wealth.”

REPORT FROM NORTHUMBERLAND AND DURHAM.

FEB. 4.—The Coal and other staple trades of the district continue satisfactory, on the whole. The iron trade, though good, can scarcely be said to be so very active as of late; a lull has evidently occurred; this, however, may only be temporary, but the result must prevent any further rise taking place at present. What the effect of the war may be which has just broken out it is difficult to predict; but the effect on the general trade of the district, including manufactures of all kinds, can hardly fail to be prejudicial. But, at the same time, it seems quite possible that, so far as the coal and iron trades are concerned, the reverse may be the case. During the Crimean war the demand for coal was most active, and very high prices were realised for steam coal especially. It appears, therefore, to be quite possible that the district may not suffer so much from the war as might at first be feared. The colliers in the district are generally in a rather excited state. Although “peace” has at length been restored, and full work will now very shortly be reached at Brancepeth, the men at various works are making demands for advanced prices. The approach of the yearly “bindings,” which take place on or about March 22, causes some excitement, especially as the men have lately expressed an opinion adverse to these yearly agreements. Only a part of the colliers in the district work on this system, so that the question only affects that portion; it is, therefore, to be expected that some excitement will exist until the question of the yearly bonds has been decided. It is said that some misunderstanding has taken place between the miners and the owners at the extensive coal works of Messrs. Pease, in the West Auckland district, and that a strike there is not unlikely to take place. We, however, think that the men, after the experience they have just had of the effect of those things, will not blindly or rashly take such an extreme course. Whatever may be the cause of the misunderstanding, they will, we have no doubt, hesitate before following the course indicated, and give the matter due consideration.

The new mode of preparing cast metal tubing for the purpose of insertion in upcast shafts, &c., has been adopted by Mr. Gibson, engineer at the Ryhope Colliery, near Sunderland. Various modes of preventing the rapid corrosion which takes place in shafts of metal tub have been proposed and tried. The most usual mode adopted is to case the inside of the tubing by means of fire-brick, which is galled up in flanges prepared for the purpose. A process has also been tried by which the metal tub is coated by a thin covering of enamel, or potters' fine glaze; but this will be discarded on account of the great cost. The process adopted by Mr. Gibson consists in “chilling” the metal segments, in a similar manner to that adopted in “chilling” wheels—the segment when hot from the casting being fitted into a pan for that purpose. The effect is, the segment is case-hardened to a certain depth of the metal. One we noticed was hardened to a depth of 7-16th of an inch, the total thickness of the metal being 14 in. The idea, we believe, is quite original; and the metal casing so formed must be an immense improvement on the old method, as in the latter case the metal was so very soft as to be easily acted upon by the gases in the shafts, and seriously injured in a comparatively short time. This, however, will be almost entirely obviated by the invention of Mr. Gibson.

[There was appended to our last week's letter a brief notice, by a correspondent, of Messrs. Palmer and Co.'s letter to Mr. Doubleday, respecting the experiments made by them with the Hartley and Welsh steam coal, and also some remarks thereon. With the views there expressed we do not agree; we do not believe that the statement given by them contains any exaggeration, but on the contrary, that the results are there accurately given. With respect to the relative value of Hartley and Welsh steam coal, we have always contended for the superiority of the former, and as yet have seen no sufficient reasons to change our views. The question, so far as we are aware, remains yet to be settled, unless the late experiments instituted by the Government are considered conclusive; but we can only judge of this when the results are published *extenso*, which, it is hoped, will shortly be done.]

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

FEB. 4.—The Iron Trade in both the great districts of Staffordshire is in a position which renders it rather difficult to speak of it with confidence. Large orders were given out at the close of last quarter and the commencement of the present one, and the leading manufacturers have plenty to do. Fresh orders are not coming in rapidly as yet, but from the United States and Canada there is a good demand, and it is stated that the great buyers cannot get orders taken for early completion in Wales or the North. The smaller makers are in some cases getting their specifications pretty well worked off, and are looking out for new contracts. Pig-iron is not altered in price, except that a few makers who are compelled to sell are taking rather less than they were a month ago, and in some cases persons who bought largely at the lower prices, previous to the late advances, are securing a fair profit by re-selling rather below the makers' rates. It is a question of great interest what influence the war on the Elder will exercise on the trade. Coal keeps very dear, and ironmasters grumble greatly at the poor stuff they receive, and the enormous price they pay. A great quantity of coke comes from Wales, Derbyshire, and Lancashire, and the price of this article has not risen in proportion to that of coal. A strike of the colliers of Messrs. G. B. Thorneycroft and Co., at Bradley, near Bilston, has resulted in their demand being acceded to. When the last advance was made in the price of iron it was agreed to raise the wages of these men 3d. per day, but they demanded 6d., which is now conceded, making their wages 3s. 6d. per day's stint. This advance will apply, no doubt, to all the colliers in the Bradley district, where thick and thin coal lie in the same field. The nail manufacturers about Dudley have agreed again to advance wages at from 10 per cent. downwards. At the North-Western Railway Company's Works, at Crewe, the puddlers are still out on strike. They demand 11s. 6d. per ton; they have been offered 11s., but refused to accept it.

At the meeting of the Fenton Improvement Commissioners, on Tuesday, the question of the appropriation of the 1251l. to which the district of Mr. Wynne, Government Inspector, is entitled from the surplus of the Hartley Fund was mentioned. The Chief Bailiff, Mr. Higginbottom, said, as has often been urged in this letter, that he did not think the money would be of much service to the districts unless it could be made a sort of nucleus for a permanent fund; and Mr. Wynne had undertaken to get Mr. Wragge, Earl Granville's agent, to bring it before the Iron and Coalmasters at their next quarterly meeting, to see whether something could not be done to influence the miners themselves to do something towards making the fund permanent, and of such a character as would be of service to the district.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

FEB. 4.—There is a continuance of activity in the Iron Trade, notwithstanding the threatening aspect of affairs on the Continent, and the high rate of discount. The Government having resolved to coat ten additional vessels with armour-plates, the manufacturers of this description of iron have been supplied with large orders, 1000 tons being about the amount required for each vessel. The Millwall Company are making for the *Lord Warden*, and Messrs. Brown and Co., of Sheffield, for the *Bellerophon*, these being the two first ships to be coated. There is a good demand for rails, not only for the home department, but for the colonies. The Battery Company are executing a large order for India; and, should even a portion of the projected new lines be granted by Parliament, there will be a great impetus given to this department of the iron trade.

The Steel Trade is likely to be permanently benefited by the introduction of that metal extensively in the art of warfare. At Sheffield spherical steel shot have been made with great success, and the same may be said of the manufacture of steel cannon. The cutlery trades are doing a good business, and there is also great activity prevailing in the railway spring trade; indeed, the trade of Sheffield is reported to be daily improving. This is clearly demonstrated by the extension of the various works and the erection of new ones. Messrs. Habershon, of Rotherham, have provisionally registered some improvements in machinery for rolling, straightening, and tapering round rods or bars of iron or steel, by the employment of three or four rolls in combination, inserted at the end of and passed between the rolls, in the direction of their longitudinal axis. Two of the rolls revolve in contact with the bar, and the third and fourth with the rolls, so as by rotating with them to secure the simple and effective working of the machine.

The Coal Trade, as we have intimated some few weeks ago, appears to be improving to an extent unparalleled in these counties of late years. The greatly increased demand for iron, and the fuel required to keep going the additional furnaces, is such as to keep the colliers in active operation. An increased supply is being sent into Lancashire, but it is not of moment, as employment is in many of the districts a scarce commodity, and the many large factories with smokeless chimneys only too plainly indicate the nature and extent of the depression. The Chesterfield and Silkstone Colliery Company are pro-

securing the development of their works, which only a short time ago seemed to be "hanging fire" for want of capital. The directors, however, have taken the bull by the horns, and have faced their difficulties boldly. They have had so much water to contend with, that their original estimated capital has been exhausted. They had a valuation made of the property, which showed that, besides what they had expended, there were assets amounting to upwards of 20,000*l.*; the result was that the company obtained another 10,000*l.* to complete their works. The colliery in Brampton, Derbyshire, which was formerly owned by Messrs. Nicholls and Fletcher, has been sold to a limited liability company, who contemplate greatly extending the works. They have already purchased the colliery belonging to Messrs. Swallow, and it is intended to construct a mineral railway from the works to the Wingerworth siding, which is not two miles in extent, and the making of which would not be attended with a very large outlay of capital. It would greatly facilitate the transit of coals, which are the Silkestone bed, and would also materially cheapen the cost. Messrs. Barber, Walker, and Co., coalmasters, of Eastwood, have recovered 4000*l.* against the Nottingham Canal Company, for damages sustained by them by the leakage of the canal into their coal mine.

REPORT FROM MONMOUTH AND SOUTH WALES.

Feb. 5.—The Iron and Coal Trades remain without any very important alteration since my last report. The books of the ironmasters are well filled with orders, and the current prices are maintained with firmness. The quotations for coal are going up, and there is every probability of another considerable advance in price before long. Tin-plates are in fair request, and there is an average business doing. The Pembroke Iron and Coal Company are about to place their furnaces at Kilgetty in blast again. The make of these furnaces stood high in the market formerly for tin-plates, sheets, and cable-iron.

The Bristol and South Wales Railway Wagon Company half-yearly meeting, on Monday, passed off far quieter than was expected, no reference being made to the disputes with the promoters of the new company. A dividend at the rate of 10 per cent. per annum was declared for the half-year, and a further sum of 250*l.*, or about 1½ per cent. per annum, was divided as a bonus among the shareholders. Mr. Stock brought before the meeting the desirability of increasing the number of directors, and he proposed that Mr. C. H. Hewitt and Mr. Thomas Gibson should be elected on the board; this was seconded by Mr. Handel Cassham, and unanimously agreed to. A company has been projected with the view of constructing docks at New Milford, or better known, perhaps, as Neyland, the terminus of the Great Western on the west coast. The estimate cost of construction is about 200,000*l.* The principal promoters are London capitalists, and it appears that a large amount of the capital has been already subscribed for.

The Temperance Hall, Tredegar, was again crowded on Friday, to hear the decision in the case of John Curley, who was charged with leaving the employment of Messrs. Levick and Simpson, Blaenau, without having given the usual notice. Brief details of the case were given in last week's Journal, the defendant being one of the colliers on strike at Blaenau. The Rev. E. Leigh, the magistrate who sat on the occasion, said he had carefully considered the evidence, and he had come to the conclusion that Curley had left without just cause, and without having given the requisite notice, and for this offence he would be committed for one day. The defendant having already been more than one day in the custody of the police, he was at once discharged. Attempts are being made to enlist members for the Miners' Union in this district, but it is evident, from the small number that have joined, that the colliers and miners of South Wales, or, at least, the great majority of them, look with no favour upon the proffered Union. The cause of this apathy may be easily explained, from the fact that all such unions or combinations have always done more mischief than good, and, as a rule, the men have had to suffer in the end, because they have connected themselves with the movement. It is not surprising, that the Union has met with so cold a reception.

The directors of the Bank of Wales have been further strengthened by the election of Mr. Sheriff Cawston to the board.

The case of Thomas Thomas, Mynyddalwyn, colliery proprietor, came again before the Bristol Bankruptcy Court, on Tuesday. Mr. Press said that on the last occasion he applied for an adjournment for six months, but Mr. Britton, who appeared for the bankrupt, urged that it should be for three, and his Honour then said that if any further time was required, it should be recalled that the original application was for twelve months. It had so happened, however, that the memorandum of adjournment was drawn up through the mistake of all parties, for two months, and he now applied for a further adjournment to the time first proposed—six months. His Honour said he forgot what was the object of the adjournment. Mr. Press said it was to enable his clients to prosecute enquiries as to certain mortgage transactions of the bankrupt. Mr. Blakey said his Honour would remember that the assignees expressed an opinion that these enquiries would lead to no benefit, and that the creditors or Mr. Press's clients, if there were to be another adjournment, it might as well be for six months, with the question of costs reserved. Mr. Press quite understood that the question of costs was reserved, and added that he might have to apply for costs. The case was then adjourned to the 7th of June.

SOUTH WALES INSTITUTE OF ENGINEERS.

The general meeting of members was held at the Castle Hotel Assembly Room, Merthyr, on Wednesday, when there were present—Mr. A. Bassett (President); Mr. W. Menelaus (Vice-President); Mr. W. Adams, Ebbw Vale; Mr. Cox, Ebbw Vale; Mr. Phineas James, Ebbw Vale; Mr. Gwyn Williams, Mr. J. Williams, Lletty Shenkin; Mr. Maynard, Crumlin; Mr. Matravels, engineer, Blackfriars Bridge; Mr. Thomas Evans, Government Inspector of Mines for South Wales district; Mr. J. James, Newbridge; Mr. E. Bridgen; Mr. C. A. Harrison, New Tredegar; Mr. G. Wilkinson, Aberdare Valley; Mr. J. Naysmith, Aberaman; Mr. W. Bryant, Bridge-end; Mr. George Martin; Mr. George Brown, Mountain Ash, &c.

Amongst the diagrams, plans, and specimens exhibited in the room were the following:—Wishaw Coal Fields, showing sub-division into lots; Scottish Coal Measures south of the Forth; plan of Morryton Pit Workings; and Scotch Coal Measures, by Mr. Ralph Moore; also, plan of Long Wall Working; and Long Wall Working at Lletty Shenkin Colliery, by Mr. John Williams; specimens of Drilling and Panning Work used in collecting the different parts of the new Blackfriars Bridge, in course of construction at Crumlin Works; also, several diagrams, showing the mode adopted in preparing Drill Work at Crumlin, and illustrative of the paper read by Mr. Maynard, on Multiple Drilling for riveted boilers, girders, &c.

Mr. BRIDGEN (the secretary *pro tem.*) read the minutes of the last meeting, which were unanimously confirmed.

The President then read his opening address, as follows:—In occupying the Presidential chair for the first time, I beg to return to you my sincere thanks for the honour you have conferred upon me in electing me your President for this year. I have not accepted the office without some little hesitation, knowing the responsible duties that must be discharged in connection with it; and having a jealous wish that an institution which has been commenced and carried on during the last six years under such bright auspices should in no way retrograde during my year of office. But, feeling convinced that I shall receive from its members the invaluable support that at all times has been given to my predecessors, I undertake office of President with much pleasure, and I beg to assure you that I shall deem it a great privilege to be enabled in any way to further the objects of a society that bids fair to become, in time, one of the most important institutions in the country. And it must be a source of sincere gratification to the original promoters to witness the very great success that has resulted from their efforts. If we institute a comparison of the progress of this institution with others of a similar character, having the same objects in view, and in connection with engineering science, we find that we are by no means placing ourselves in an unfavourable position. The Institution of Civil Engineers, which ranks as the first society of the present day in connection with engineering science, was enabled to do this, in part, by the fact that it was established in 1818, and in time, one of the very highest scientific acquirements, and acknowledged reputation, in their profession; and it must be most encouraging to the members of other institutions to find to what a degree of usefulness and celebrity this institution has now attained. The origin of this institution is very interesting, for we find about the year 1816 Mr. Henry Robinson Palmer, who was then articled to Mr. Bryan Donkin, suggested to Mr. Joshua Field the idea of forming a society of young engineers, for their mutual improvement in mechanical and engineering science. The earliest members were—Mr. Palmer, Mr. Field, Mr. N. Mansfield, Mr. J. Jones, Mr. Charles Collins, and Mr. James Ashwell. This society was regularly constituted on Feb. 2, 1818; these gentlemen were afterwards joined by Mr. Thomas Mansfield and Mr. John T. Lethbridge; in the year 1819 this number was increased to eleven. In the following year (1820) Mr. Telford was formally installed President, having been memorialised by the six gentlemen who originated the society to accept that office, as they felt convinced that Mr. Telford would take an interest in the institution it could not fail to be successful with so eminent an engineer in the chair; this proved to be the case, for in that year 32 new members were elected, and when the institution had been in existence five years, there had been 54 elections. Mr. Telford continued President until his death, which took place on Sept. 2, 1834; at this date there were 200 members. The late Mr. James Walker was elected President, and occupied the chair until Jan. 1845, after which the chair was taken by Mr. John Rennie, and has been successively filled by Mr. Joshua Field, Sir William Cubitt, Mr. James Meadows Rendel, Mr. James Simpson, Mr. Robert Stephenson, M.P.; Mr. Joseph Locke, M.P.; Mr. George Parker Bidder, and now by Mr. John Hawkshaw, each gentleman holding the office of President for two years. In the ordinary course of rotation, Mr. I. K. Brunel should have succeeded Mr. Stephenson, but he requested that he might not be put into nomination, owing to a pressure of business and ill-health. The number of subscribing members of all classes on the books at the close of the last year was as follows:—Honorary members, 18; members, 425; associates, 188; graduates, 25; making a total of 1040. The Institution of Mechanical Engineers was established in 1847—the present number of subscribing members is 550. The North of England Institution of Mining Engineers was established in 1855, under the presidency of Mr. Nicholas Wood. The number of members now amount to 200. The South Wales Institution of Engineers was established in Oct., 1857, at Merthyr, under the presidency of Mr. Menelaus, and has just entered upon its seventh year, during which period nineteen meetings have been held at Merthyr, Cardiff, Newport, and Swansea; seventy-one papers have been read, discussed, and circulated. The number of subscribing members up to the close of last year were 170. There were also seven members proposed last meeting. That these institutions, in their different spheres, have had a most beneficial influence not cannot, I conceive, for an instant be questioned. It is in papers are fully and fairly discussed, containing well-defined schemes and arguments, having for their object either economy in the cost of the production of the raw materials, or improvements in the mode of conversion, or, indeed, any other subject bearing upon the improvement or economy in the mining or manufacturing operations of the district; and the views of practical men, well qualified to express sound and safe opinions on the subjects under consideration, are elicited, that such discussions cannot fail to be productive of great good, and the means of obtaining a vast amount of practical and valuable information, which, probably, would remain dormant, unless an opportunity presented itself of facilitating an interchange of ideas, and which can only effectually be accomplished by the establishment of institutions of this kind, when discussions form an important element of the objects of the society; and as this district is rapidly developing its resources in a ratio probably unparalleled in the history of commercial enterprise, so I trust it will be found that this institution will continue not only to increase in a number of its members, but that the papers contributed will be marked by their practical and useful character, and the discussions will also simply testify the care and consideration that has been

given to the subject, and that they will at all times be conducted in that temperate and cautious manner that cannot fail to carry with them additional weight, so that ultimately this institution will occupy a position amongst the scientific societies of this country, that I think and believe it is fairly entitled to expect. To those members who have not already favoured this institution with any original communication, I would beg to ask them to do their part towards developing its usefulness; and although it was not specifically stated at their election that they were expected to contribute a paper, still it is hoped that each member will, as far as he can, assist in promoting the objects we all have in view; and as the ironmasters, together with the proprietors of our extensive steam coal collieries, will either directly or indirectly derive much benefit from institutions of this kind, so I hope they also will use their influence to promote as far as they can the usefulness of this society, by taking a part in our meetings and the discussions. The extensive mineral deposits, together with the enormous manufacturing establishments of this district, present a wide and singularly interesting field for the development of engineering science in all its branches, and now the introduction of railways has become so absolutely necessary in every part of our mineral district for the purpose of transporting the produce of the various works to their destination, and their construction year after year being naturally better understood, the civil engineer is called upon to carry out works at a cost far below that which was originally deemed necessary for such undertakings, where railways are required and constructed for mineral traffic only, it is certainly unwise to expend any of the capital raised on works which cannot add to the stability of the line, strong substantial work only being necessary. If these objects were kept more in view, the cost of our railways would be greatly reduced. In the mountainous districts of the country, the construction of railways with very severe gradients, and if such gradients had not been adopted, the construction of a large portion of the railways through this district would never have taken place. The difficulties that formerly presented themselves in working over heavy gradients are, to a great extent, reduced by the skill of the mechanical engineer. Engines are now constructed capable of accomplishing duties that ten years ago were unknown, and loads of 150 tons can be conveyed over gradients less than 1 in 40 for a distance of between six and seven miles at the rate of ten or twelve miles an hour, the weight of the engines, when loaded, being about thirty or thirty-five tons; and although the locomotive cost is considerably augmented by the severity of the gradients, and, however, objectionable they are to the working of heavy traffic, still the power required to overcome them can easily be calculated, and reduced to a financial question; but not so clearly defined are the injurious effects arising from the adoption of severe curves, which not only occasion a fearful amount of extra friction, for which an extra amount of power must be provided, but the fearful wear and tear to the machinery is so great, that it is undoubtedly false economy to adopt them under peculiar circumstances, or on station sidings, where the engines and trains travel at a very reduced speed. These observations would not apply to small locomotives that are employed about ironworks, as they are constructed especially for that purpose. The mechanical engineers are also called upon to construct machinery with various new appliances, suitable to the altered circumstances that constantly arise, and those who visited the Exhibition of 1862, must have been struck with the magnificent display of machinery, and the wonderful improvement constantly taking place in this department. The mining engineer, no less than the agricultural or the general engineer, is called upon to apply his thorough knowledge of the geology of the district in which he engaged will first enable him to determine the best sites for winning the minerals and the establishment of the works. The laying out of the works, both above and below ground, requires careful and practical consideration, as much depends upon the future prosperity of the works by the first step being carefully taken. To ensure, as far as possible, safety to the men is true economy; together with the adoption of such machinery as will enable him to work and land his minerals at such a cost as will prove remunerative, assuming Nature has done her part. Of late years the question of ventilation has been thoroughly and practically considered, and experiments have been conducted on extensive scales for the purpose of solving many difficulties that presented themselves. All these experiments have resulted in great good, and the amount of air that is now passed through the major part of our collieries in South Wales is far in excess of the quantity which is required to neutralise the regular discharge of gas that exudes from the various working places of the mine, but no amount of ventilation, however well distributed, can successfully dilute such an amount of gas that may be inhaled, and a moment's warning, in a high state of tension, from falls, consequently in collieries, and in the case of safety-lamps can be depended upon for perfect safety. Apart from the necessity of proper ventilation in collieries, to render as far as possible harmless the gas that is generated in mines the health of the men is one of great importance, and there is no doubt that the condition of the miner is now easily improved, now he is enabled to breathe a proper quantity of fresh air, which was denied him before the system of ventilation was so well understood. In Scotland, during the last century, the work of the miner was one not only of toil, but of great hardship, in which, unfortunately, his wife and family had to take their share. The graphic account given of the coal mines worked in Scotland is so well told by Mr. Bold that I cannot refrain from quoting the following passage. Mr. Bold, who for upwards of half a century was considered a leading authority on all matters relating to the mining of Scotland, gives the following lucid description of the mode in which the coals were worked previous to 1800, and of the employment of female coal bearers:—"The collier leaves his house about 11 o'clock at night to descend the pit with her old daughters, when she is accompanied by her wife, who is retreating to rest; their first work is to prepare coals by hewing them down from the wall. In about three hours after, his wife (attended by her daughters, if she has any sufficiently grown) set out for the pit, having previously wrapped her infant child in a blanket, and left it to the care of an old woman, who for a small gratuity keeps three or four children at a time, and who in their mothers' absence feeds them with ale or whiskey mixed with a little water; the children a little more advanced in age are left to the care of a neighbour. The mother having then disposed of her children descends the pit with her old daughters, when she is accompanied by her wife, who is retreating to rest; their first work is to prepare coals by hewing them down from the wall. 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lowing papers, which will be discussed at the next meeting:—"On Coal Mining in Lancashire," by Mr. R. W. Wynne; "On Multiple Drilling for Riveted Bolters, Girders, &c.," by Mr. Maynard.

The President said the paper promised by Mr. Harris "On the Lignites of Bovey Tracey" had not been sent, in consequence of Mr. Harris's illness. Votes of thanks were passed to Mr. Maynard and Mr. Wynne for the papers. Mr. MAYNARD, in acknowledging the compliment, said he did not think his paper would create much discussion, but he had endeavored to write on the subject as correctly and as instructive as lay in his power. This brought the discussions to a close, and the members afterwards sat down to an excellent banquet at the Castle Hotel. The usual loyal and other toasts followed.

VOLTAIC ELECTRICITY—NEW CALORIC BATTERY.—At the Inventors' Institute, on Thursday (Capt. J. Selwyn, R.N., in the chair), Mr. Callender described an improved form of door, combining the two principles of the slide and hinge. Mr. James Dickson then read an interesting paper "On certain inventions for ensuring the economical and efficient production of Voltaic Electricity for Lighting Streets and other purposes." The object of the paper was to explain the means by which electricity could be readily and economically produced. The history of voltaic electricity was carefully traced from the time of Volta, from whom this form of electricity took its name, to the present time, when mention being made of Grove's, Smee's, the Maynard's, and other batteries which, from time to time, have been looked upon as vast improvements upon the existing apparatus. The theories of Maynard and Smee were referred to, as well as the researches of Prof. Tyndall, whose "Heat as a Mode of Motion," contains so much valuable information upon the subject. He considered that the rapidity of the vibration of the atoms in a conductor was exactly in proportion to its conducting power, and explained that, whilst a battery was producing light and heat, less material was being consumed than when the battery poles are directly connected with each other. Mr. Dickson's battery was described as one of the hot-class—the sulphuric acid was heated to 600° Fahr. He claims by his mode of applying heat to be able to use iron and other cheap metals, instead of the dear ones—zinc, copper, &c. The voltaic mobility of the atoms of an electrified determined, he considered, its force rather than its specific gravity. When oil of vitriol was heated to 350° Fahr. only, the electric action is less powerful than when heated to 600° Fahr., probably owing to the waves being less rapid. With the necessary percolating apparatus he was convinced that his battery would be successful for lighting purposes. He considered 15 to 20 of his cells equal to 20 to 25 of the cells of his battery. Grove's battery cost 1s. 5d. to produce the same amount of electricity as that produced for 10s. 4d. by Dickson's. Comparing the lighting powers, 11s. 4d. with the caloric battery will produce the same amount of light as 1s. 5d. by Grove's. He declared that the sulphur liberated at the negative poles could be reconverted into sulphuric acid to the extent of 19-20ths. The oil of vitriol, during the working of the battery, becomes concentrated with water, but the acid is easily and cheaply reconcentrated. In Smee's, Daniell's, and Grove's battery, the sulphate of zinc cannot be recovered, whilst in his caloric battery the recovery was not difficult. The Chairman expressed the fear that the invention promised so much that he was no more likely to perform it than to obtain perpetual motion; indeed, if the invention were not overrated, they would certainly be nearer perpetual motion than they had ever been before. Mr. Varley suggested that as the principal feature in the invention appeared to be the heating of the materials, it was not impossible that it might be as great a step in advance as the introduction of the steam engine in the manufacture of iron; this, of course, remained to be seen. The new light will be exhibited at the meeting, on February 18, when an opportunity will be afforded for examining the caloric battery in operation.

IMPROVEMENTS IN FURNACES.—As an improvement in constructing cupolas and blast-furnaces, Mr. G. Bedson, of Glamorgan, proposes to construct a wrought-iron water-chamber round the lining and within the exterior masonry, the water in the said chamber being kept cool in the same manner as the water-chambers round tuyeres are usually kept cool.

PREVENTING SMOKE IN FURNACES.—Mr. H. D. Furness, of Riga, Russia, has invented a peculiar combination and arrangement of apparatus for preventing smoke in steam-boiler and other furnaces, whereby a more perfect combustion is obtained, and a considerable economy of fuel effected. According to this invention, as applied to an ordinary locomotive boiler, it is proposed to employ a small steam-pipe, which is carried from any convenient part of the boiler through the fire-box and through one of the ordinary tubes of the boiler, and extends to the front of the smoke-box. At this part it is provided with outlets or nozzles, through which the steam, in a superheated state, is discharged into a corresponding series of tubes, which pass through the smoke-box, and communicate with some of the ordinary boiler-tubes. By this arrangement, apparatus a current of currents of heated air and superheated steam is directed into the furnace, so as to mingle with the gases and products of combustion at the moment of the formation. The nozzles or outlets of the steam-pipe are placed some little distance from the mouths of the air-pipes, so that the air will enter freely into such pipes, and be then carried into the furnace by the steam-jets. In adapting the invention to a marine boiler, the steam-pipe is carried from a convenient part of the boiler through the smoke-box, where the steam becomes superheated, and thence passes to a pipe, or pipes, situated underneath the grate-bars, into and through which the superheated steam is directed, so as to carry with it a current of heated air, which are directed on to the back part of the fire, so as to mingle with the gases at the best point for combustion. In an ordinary boiler or furnace, the steam is brought direct from the boiler by a proper steam-pipe to the mouths of one or more air-tubes, placed under the grate-bars, and passing up through the bridge, or otherwise, into the back of the furnace, the air becoming heated as it passes along the air-tubes before entering the furnace.

BRYNFORDD HALL.—A report from this mine, dated January 30, says:—"Both Simon's and Davies's veins have improved, the latter being three times as good as it was when last reported, and now worth fully 2½ tons, with likelihood to improve, as we are daily expecting to cut Black's vein in this driving. We have passed through a strong pipe of ore going down below the level in Milw vein, and the fore-blast is also yielding fine lumps of ore and spar; the vein is 4 ft wide, and having the same likelihood for a discovery as before."

DEVON COPPER (Okehampton).—The water here now carried off by the adit, the men have again gone on with sinking. The lode maintains its great size and highly promising character, containing as fine a gossan as ever seen, quantities of molybdenite, and stones of ore. The best portion of the lode, however, is not carried in the shaft, but will be cut in its ascent, its value being a few fathoms more sinking. The most sanguine hopes are entertained of early success, and seem to be warranted by the unusually strong appearances at and near the surface.

EAST GRENVILLE.—This mine is gradually improving, and, as the returns will now be increased, the shares are worth the attention of the public. The shaft and ends are worth about 40l. per fathom, and the slopes 34l. per fm.; together, 74l. per fathom. The tin is of very high quality, the copper of low produce; but the next sampling of copper is expected to be of better produce.

GARREG.—The hopes lately expressed that matters looked promising for a better state of things at this mine seem not only to continue, but to gain considerable strength, and there is good reason to expect that the prize-worthy perseverance of the adventurers will be very soon rewarded. The regular branch of ore in the winze continues to improve going down, and will probably lead to something good.

THE CAMBRIDGE CONSOLIDATED GOLD MINES have considerably improved, and it is stated that returns of gold will shortly be made.

THE COPPER TRADE—AMERICAN SUPPLY.—The "United States Railroad and Mining Register," after quoting a letter from the Mining Journal of Jan. 2, says:—"We not infrequently observe, in European papers, predictions of a deficit in copper supply, based on the known and acknowledged exhaustion of copper mines noted hitherto for their large product, and on the rapid increase in the consumption of copper metal. From the European standpoint is seen an expanding market and a diminishing supply. But the copper mines of the United States are not only numerous, but, when, through cycles of time, have been derived the copper which, with fluctuating prices, has supplied the demands of manufactures and commerce. Here, however, on this side the Atlantic not only is there no apprehension that the consumption of copper must be greater than the production for some years to come; but, on the contrary, it is here believed to be a part of America's destiny to export copper to the old nations across the sea, along with the great staples which already swell the exports of the United States to more than \$200,000,000."

Native copper is almost exclusively a staple product of Michigan as is hard-anthracite the exclusive staple export product of Pennsylvania. And from the Lake Superior copper mines of Michigan there were in 1862 sent to market more than three-fifths the number of tons of copper that were yielded by the ores raised from the British mines. In these days of the infancy of the copper trade of Michigan, the native copper product of her Lake Superior Mines is but little less in tons than the culminated and declining product of the copper mines of Great Britain. And after this present year, the copper product of Michigan will surpass the joint output of the British copper mines, for the Michigan product increases, whereas the British product declines. The rare and brilliant financial success of the Minnesota, the Quincy, the Franklin, the Pewabic, the Cliff, the Central, and the glowing promise of other Michigan copper mines, together with the new mines which, in the ensuing spring months, will have completed their stamp mills, and thereby enlarged the number of copper-shipping mines, are facts which shine as a galaxy, and make the United States abate with mining triumphs.

True, the copper mines of Michigan are not yet so numerous as the copper mines of Europe. In European journals, yet Lake Superior ingots do reach the metal dealers beyond the sea, in the great markets in the British Isles and on the Continent—markets who want are stimulants to American development in mining enterprise—markets wherein the future demand for copper will inevitably be supplied in large part from Lake Superior sources. Hence the sooner European predictors of deficit in copper supply recognise in Lake Superior the region which is to silence their griefs and silence their misgivings, the sooner will a common interest between the American miner and the foreign consumer be understood. For Europe there is no alternative; she must use Lake Superior copper, for its cheap production, easy transportation, and excellent quality will make for it a name and a market wherever copper is in demand. And as no metal grows wider or faster in favour than copper, the mines of Lake Superior will distribute their product in all the channels of commerce with the Old World. When, therefore, Lake Superior is considered as a copper mining region, the mediator must give scope to his thought, for the theme is one which covers much ground, blending with that which is real in the present, that which is legitimately foreshadowed in the future.

In 1862 the copper mines of Great Britain produced jointly of copper, 14,843 tons. In 1862 from the copper mines of Lake Superior there were shipped, of copper, 9020 tons. In 1862 twelve of the copper mines at Lake Superior produced each over 100 tons of copper, the product of one mine, the Cliff, being 1634 tons. In Great Britain the copper mines have been worked for centuries, whereas less than a score of years have elapsed since the first ton of native copper was shipped from Lake Superior. In Great Britain the copper mines are giving out, are yielding a diminished product; at Lake Superior virgin veins and lodes are every year uncovered and developed, the yield being rich and unflagging, and the prospect being full of profit and promise. However, the copper market may expand, and the consumption of the metal increase, the Lake Superior copper region will be found an adequate source of export and supply."

HOLLOWAY'S OINTMENT AND PILLS—RHEUMATIC AND NERVOUS PAINS.—The cold mornings and evenings will provoke these tortures in constitutions susceptible of these maladies. Nothing affords so much relief as Holloway's Ointment well rubbed upon the skin after repeated warm fomentations. Thousands of testimonials bear witness to the wonderful comfort obtained from this safe and simple treatment, which all can afford. Holloway's Ointment, assisted by the judicious use of his pills, is especially efficacious in assuaging the sufferings from cramps and other muscular pains, whether they be acute, chronic, external, or internal. It is earnestly recommended that every sufferer from such pains should give Holloway's remedy a few days' trial, which will convince the invalid that ease will reward continued perseverance.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA
IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 15th instant, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to SUPPLY—
CAKE COPPER.

And that the conditions of the said contracts may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 15th day of February, 1864, after which hour no tender will be received.
GERALD C. TALBOT, Director-General.

India Office, February 4, 1864.

TO IRONFOUNDERS.—TENDERS ARE REQUIRED, by the 19th of February, for about TWO THOUSAND TONS OF PIPES and OTHER CASTINGS, COATED, FOR EXPORT.—Specification may be obtained, and tracings seen, on application to Messrs. Wm. Bird and Co., 2, Laurence Pountney-hill, London, E.C.

BEST MANGANESE SPIEGELEISEN DELIVERED AT ANY PORT OF THE UNITED KINGDOM.—For testimonials, and all information, apply to Wm. Bird and Co., 2, Laurence Pountney-hill, London, E.C.

NICKEL SPEISS AND ORE WANTED. Arsenical preferred. Address, with guaranteed analysis and price, "A. B.," care of Mr. Alfred Cockrell, 37, Upper Thames-street, London.

WANTED, A PARTNER with a capital of £1500 to £2000, in a COLLIERY IN SOUTH WALES.—Address, "A.," Post-office, Aberdare.

CIVIL ENGINEERING.—PUPIL IN THE OFFICE OF A GENTLEMAN OF EXTENSIVE GENERAL PRACTICE, and having railway and other works abroad. Premium moderate.—Address, "F. G. S.," Clifford's Newspaper Office, Temple, E.C.

THE IRON TRADE.—A GENTLEMAN, who has had the sole management of ironworks for many years, is now OPEN to an ENGAGEMENT. He is fully conversant with the raising of coal and iron ore, the erecting of works, and the manufacture of iron in all its branches and details, and in the conduct of the correspondence and sales, and can give the most satisfactory references and testimonials of ability and character.—Address, "B. Y.," Mining Journal Office, 26, Fleet-street, E.C.

IRON AND TIN-PLATE TRADES.—MOST ELIGIBLE SITE, with water-power, and a clear stream for tin-plate purposes. Extensive canal frontage, close to railway station and siding. Coal abundant and cheap. Near Newport, Monmouthshire.—Apply to Mr. THOS. THOMAS, land agent, auctioneer, &c., South, Glamorganshire.

TO IRON MANUFACTURERS.—A PARTY IN GLASGOW, who has an extensive connection, and who could influence a large trade with Clyde shipbuilders, DESIRES A FIRST-CLASS AGENCY for ANGLE and T-IRON, SHIP and BOILER PLATES, and SHEET IRON, or for any of these singly.—Address, "M. A. C.," care of Messrs. Anderson and Watt, 64, Buchanan-street, Glasgow.

TO MINE ADVENTURERS AND OTHERS.—A MINE, which has made important returns of ore, and is of a peculiarly eligible character, together with the MACHINERY and MATERIALS thereof, TO BE DISPOSED OF on liberal terms. The concern would only require a moderate capital.—Apply to Messrs. PAUL and LINTON, solicitors, Plymouth and Redruth.

TO ENGINEERS, CONTRACTORS, AND OTHERS.—PERSONS DESIROUS OF PURCHASING THE PATENT RIGHT OR ROYALTY for JEWELL'S PATENT FLUE AND TANK BOILER are REQUESTED to FORW. AD OFFERS to his agent, Mr. W. T. RAWL, Branch Patent Office, 11, Clare-street, Bristol, where plans and copy of specification may be obtained.

TO INVENTORS AND PATENTEES.—A GENTLEMAN having an extensive connection with manufacturers, merchants, and others, would be GLAD TO UNDERTAKE THE SALE OF INVENTIONS OR PATENTED ARTICLES, on commission.—Apply to Mr. RAWL, patent office, 11, Clare-street, Bristol. N.B.—Continental and foreign agencies solicited.

HORIZONTAL ENGINES FOR SALE, at very low prices:—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAGE and Co., Laurence Pountney-place, Laurence Pountney-hill, Cannon-street, E.C.

SPAIN AND PORTUGAL.—TO GENTLEMEN INTERESTED IN MINING AND METALLIFEROUS OPERATIONS.—AN EXPERIENCED ENGINEER, having an office in MADRID, will be GLAD TO RECEIVE INSTRUCTIONS TO INSPECT AND REPORT ON PROPERTIES.—Address, "Engineer," Clifford's Newspaper Office, Temple, E.C.

MINING SETTS IN CORNWALL.—MR. T. M. PASCOE, of HELLAND, BODMIN, CORNWALL, HAS SEVERAL TIN, SILVER-LEAD, AND COPPER SETTS in a rich mineral district of Cornwall TO DISPOSE OF. An inspection will prove the value of these properties. Communications addressed as above will be promptly attended to.

SLATE QUARRIES.—G. NORTHCROFT, ENGINEER AND SURVEYOR, FESTINING, NORTH WALES, ADVISES ON THE ABOVE CLASS OF MINERAL PROPERTY.

THE BERWYN SLATE RANGE, COUNTY OF MONTGOMERY, NORTH WALES.—TO BE DISPOSED OF, A VALUABLE SLATE QUARRY, or part thereof.—Terms, and all information, can be received from H. P. M. OWEN, Esq., C.E., Llanyngw, Oswestry, until the 15th of March; afterwards, to Capt. St. Garnon, near Llanrwst, North Wales.

THE PLYM RIVER SLAB AND SLATE COMPANY (LIMITED).—WANTED, A RESIDENT MANAGER for this COMPANY'S WORKS. He must have a thorough knowledge of quarrying and splitting slates, also have a general knowledge of mechanical engineering, and be able to prepare working and progress plans and sections, and keep accounts and manage the works generally. A liberal salary will be given to a competent person. Apply by letter only, stating age, qualifications, and references, also stating salary required. By order, E. DOWLING, Sec. Temporary Offices, 9, Laurence Pountney-hill, Cannon-street, London, E.C., February 2, 1864.

RIVER TAMAR COPPER MINING COMPANY (LIMITED).—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUESTED TO SEND IN THE PARTICULARS of THEIR CLAIMS to the Liquidators of the company, No. 10a, King's Arms-yard, Moorgate-street, London, on or before the 20th day of February inst., or they will be excluded from payment.—London, February 4, 1864.

CONSOLIDATED COPPER MINES OF COBRE.—Notice is hereby given, that a DIVIDEND OF ONE POUND PER SHARE, free of income-tax, will be PAID to the holders of certificates in this company, at the offices of the association, Gresham House, Old Broad-street, on and after THURSDAY, the 11th day of February next, at eleven o'clock of the hour of Eleven and three o'clock. The proprietors must leave their certificates for examination three clear days before the day of payment. WALTER SHARP, Directors of the GEO. WHITMORE Company. Gresham House, Old Broad-street, January 26, 1864.

THE CAPE COPPER MINING COMPANY (LIMITED). NOTICE OF THIRD CALL OF ONE POUND, MAKING SEVEN POUNDS PER SHARE PAID. Notice is hereby given, that the Directors have this day made a CALL OF ONE POUND PER SHARE on the shares in this company, PAYABLE on TUESDAY, the 1st day of March next. By order of the Board, W. G. WILLIAMS, Sec. 6, Queen-street-place, London, E.C., February 3, 1864.

CONNORREE MINING COMPANY (LIMITED).—AT THE ORDINARY GENERAL MEETING of the above company, held on this day, the following resolutions were passed, viz.:—Resolved:—That the report and statement of accounts now read be received, and that the same be printed for distribution amongst the shareholders. Resolved:—That the thanks of this meeting be given to Capt. Bishop for his able management of the mine. The CHAIRMAN having been moved from the chair, and MARKHAM BROWNE, Esq., called thereon. Resolved:—That the best thanks of this meeting be given to John Francis Waller, Esq., for his very proper conduct in the chair this day, and for his exertions on behalf of the company. GEORGE DEDERICKSON, Sec. 46, Dame-street, Dublin, January 30, 1864.

Plates, 8vo., cloth, price 10s. 6d., by post 11s.
THE MINERS' MANUAL OF ARITHMETIC AND SURVEYING. By WILLIAM RICKARD. Teacher of Practical Mining in the late Mining School of Cornwall, and Principal of the Engineering Academy, 35, Upper Parliament-street, Liverpool. Truro: Heard and Son.—London: Longman and Co.; the office of the MINING JOURNAL, 26, Fleet-street; of the author, and of all booksellers.

MR. BRENTON SYMONS, M.E., WILL BE IN CORNWALL UNTIL THE END OF FEBRUARY. Orders for inspections or surveys of mineral property must be addressed to Truro.

MR. GEORGE HENWOOD, MINING ENGINEER, LOCHHEAD HOUSE, LOCHWINNOCH, SCOTLAND, OFFERS HIS SERVICES AND ADVICE on mines situated in any part of England, Scotland, Wales, Ireland, Isle of Man, &c. Mr. Henwood's extensive experience in his peculiar department of mining science is well known, and will be exerted to the utmost for the benefit of clients.

MINING OFFICES, 28, PRINCESS STREET, MANCHESTER.
LEIGH MOLYNEUX, AND CO., MINE AGENTS AND SHAREBROKERS, BUY AND SELL SHARES OF EVERY DESCRIPTION, on commission or for nett cash.

Office of the Hazel Grove Silver-Lead Mining Company (Limited), JAMES LEIGH, Secretary.

CHIVERTON WHEAL HOPE SILVER-LEAD MINING COMPANY.

Divided into 1000 shares. Conducted on the Capt-book Principle. BANKERS—The Metropolitan and Provincial, Cornhill, London. Messrs. Hawkey, Whitford, and Co., St. Columb, Cornwall. MANAGER—Capt. James Evans, late of East Wheel Rose Mine. ENGINEER—William Henry Gray, Esq., C.E., St. Austell.

This valuable property is situated in the parish of Ferranabuloe, Cornwall, and held by lease from His Royal Highness the Prince of Wales for 21 years, at 1-18th royalty. It is satisfactory to observe that this mine is surrounded by several of the rich and profitable silver-lead mines of the district, adjoining Wheal Hope and Wheal Thomas, recently taken by the fortunate proprietors of West Chiverton; from analogy to the latter, similar results in Chiverton Wheal Hope will be realised.

By reference to the reports and statistics furnished by the Stannaries Court of Cornwall of accredited sales of mineral from the former workings of the mine, the deepest point attained being 45 fms. from surface, in which level a course of silver-lead ore is opened, and already driven through for 15 fms. in length, proving as the works are extended in depth the ore increases in productiveness. This fact is strongly exemplified in West Chiverton, where the lodes have increased in value from the 40 fm. level to the 80, varying from £10 to £20, £20 to £30, and £100 per ton.

The production of silver-lead ore, upon a careful consideration of the immediate results to be obtained from this mine, the extent of ore ground opened, and the total absence or necessity for any workings of a speculative or experimental character whatever, in coming to the conclusion that in a very short time handsome dividends, of at least 20 per cent., will be realised.

There has been about £6000 expended in opening the mine, the works being of a most substantial and permanent character—thus securing a saving of a considerable amount of time and money, and all available for the benefit of the new proprietors joining in this valuable undertaking.

It has been arranged to dispose of a limited number of shares at £5 each, by payment of £1 upon application, £1 10s. upon allotment, and £2 10s. within three months. The sum of £1000 will be placed to the credit of the company, for the future working of the mine—a sum considered ample to bring the works into an efficient and profitable state.

The proprietors call special attention to the reports made by the leading agents in the district, and the returns of minerals, as recorded by the official authorities of Truro. The general opinion of all practical men is that, upon moderate outlay beyond the present expenditure, a rich and lasting mine will be realised.

Prospectuses, with detailed particulars, and reports, to be had, and applications for shares, accompanied by the deposit of £1 per share, to be made to Messrs. FULLER and Co., 2, Winchester-buildings, Old Broad-street, London, and to the bankers of the company. Priority given to the first applicants, and, in the event of no allotment, the deposit will be immediately returned.

CHIVERTON WHEAL HOPE SILVER-LEAD MINING COMPANY.

NOTICE.—APPLICATIONS for the REMAINING SHARES will be received until the 15th inst., accompanied by a deposit of £1 per share. Priority given to first applicants. In the event of no allotment, the deposit will be immediately returned.

By order, T. FULLER AND CO. Offices, 2, Winchester-buildings, Old Broad-street, London.

LONDON AND COUNTY BANKING COMPANY.

ESTABLISHED 1836.
Subscribed capital, £1,500,000, in 30,000 shares, of £50 each.
Paid-up capital, £600,000. Reserve fund, £100,000.

DIRECTORS.—THOS. TYRINGHAM BERNARD, Esq., FREDERICK HARRISON, Esq., PHILIP PATTON BLYTH, Esq., EDWARD HUGGINS, Esq., WILLIAM WILLIAM BURMESTER, Esq., WILLIAM CHAMPION JONES, Esq., COLES CHILD, Esq., JAMES LAMING, Esq., HUGH C. E. CHILDERS, Esq., M.P., WILLIAM LEE, Esq., M.P., JOHN ELEMING, Esq., WILLIAM NICOL, Esq., M.P.

GENERAL MANAGER—William McKewan, Esq.
CHIEF INSPECTOR—W. J. Norfolk, Esq.
ASSISTANT GENERAL MANAGER—William Howard, Esq.
CHIEF ACCOUNTANT—James Gray, Esq.
INSPECTORS OF BRANCHES—H. J. Lemon, Esq., and C. Sherring, Esq.

HEAD OFFICES.—21, LOMBARD STREET.

At the ANNUAL MEETING of the proprietors, held on Thursday, the 4th Feb., 1864, at the London Tavern, Bishopsgate-street, the following report for the year ending the 31st December, 1863, was read by the Secretary.

WILLIAM NICOL, Esq., M.P., in the chair.

The directors, in submitting to the proprietors the accounts of the bank for the half-year ending 31st December, 1863, have much satisfaction in reporting that the net profit for the six months, after deducting all charges, amounts to £24,325 9s. 2d., which, added to £14,343 8s. 8d. brought forward from the last account, results in a total of £38,668 8s. 10d.

Out of this sum the directors recommend that the usual dividend of 6 per cent., together with a bonus of 6 per cent., be declared for the half-year, making, with the dividend paid in August last, 18 per cent. for the year. They further proposed to carry £10,000 to the reserve fund, making that fund £100,000, leaving £16,668 8s. 10d. to be carried forward to profit and loss account.

In consequence of the great increase of the business of the bank, the directors consider it advisable further to increase the capital of the company by the issue of 7500 new shares, to be offered *pro rata* amongst the proprietors, as they appear in the register on the 31st inst., the date when the transfer books of the company were closed, such shares to be issued at the price of £40 each, being a premium of £20 per share. Full particulars of the issue will be transmitted by circular to each proprietor.

This operation will produce £300,000, out of which £150,000 will be added to the capital of the company, and £150,000 (being the premium on the shares) will be added to the reserve fund, raising the former to £750,000, and the latter to £250,000—together one million.

The directors regret having to announce the decease of Henry Overton, Esq., for many years one of the auditors of the bank. This creates a vacancy in the auditorship, which it is in the power of the meeting to fill up.

The directors retiring by rotation are—Philip Patton Blyth, Esq., Edw. Huggins, Esq., and William Lee, Esq., M.P.; all of whom are eligible for re-election, and offer themselves accordingly.

The dividend will be payable at the head office, or at any of the branches, on and after Monday, the 15th inst.

BALANCE-SHEET OF THE LONDON AND COUNTY BANKING COMPANY, DEC. 31, 1863.

Capital paid-up £ 600,000 0 0
Reserve fund 100,000 0 0
Amount due by the bank for customers' balances, &c. £24,325 9 2
Liabilities on acceptances and endorsements by the bank, circular notes, and letters of credit 1,088,916 1 9=9,334,638 11 1
Profit and loss balance brought from last account 14,343 8 8
Gross profit for the half-year, after making provision for bad and doubtful debts 227,239 9 7= 221,582 13 3

Total £10,266,221 4 4

Cash on hand at head office, and branches £1,238,139 1 3
Cash placed at call and at notice 1,066,002 7 2=2,304,141 8 5

Government and guaranteed stocks 839,168 16 9
Other stocks and securities 110,336 17 9= 950,005 14 6
Discounted bills and advances to customers in town and country £784,844 14 6
Freehold premises in Lombard-street and Nicholas-lane, freehold and leasehold property at the branches, with fixtures and fittings 110,630 18 7
Interest paid to customers 49,787 7 2
Salaries and all other expenses at head office and branches, including income tax on profits and salaries 66,721 1 2

Total £10,266,221 4 4

PROFIT AND LOSS ACCOUNT.

Interest paid to customers 49,787 7 2
Expenses, as above 66,721 1 2
Balance on bills not due, carried to new account 26,406 1 1
Reserve fund 10,000 0 0
Dividend of 6 per cent. for the half-year 36,000 0 0
Bonus of 6 per cent. 36,000 0 0
Balance carried forward 16,668 8 10

Total £241,582 13 3

Balance brought forward from last account 14,343 8 8
Gross profit for the half-year, after making provision for bad and doubtful debts 227,239 9 7

ful debts 227,239 9 7

Total £241,582 13 3

We, the undersigned, have examined the foregoing balance-sheet, and found the same to be correct. Signed, JOHN WRIGHT, Auditors. London and County Bank, January 28, 1864. E. H. SWAINE.

The foregoing report having been read by the secretary, the following resolutions were proposed, and unanimously adopted:—
1.—That the report be received and adopted, and printed for the use of the shareholders.

2.—That a dividend of 6 per cent. be declared upon the capital stock of the company, for the half-year ending the 31st. of December, 1863, together with a bonus of 6 per cent., both clear of income tax, payable on and after Monday, 15th February instant, and that the balance of £16,668 8s. 10d. be carried forward to profit and loss new account.

3.—That Philip Patton Blyth, Esq., be re-elected a director of this company; that Edw. Huggins, Esq., be re-elected a director of this company; that William Lee, Esq., M.P., be re-elected a director of this company.

4.—That Messrs. Hinds Swaine, and John Wright, Esquires, be re-elected auditors for the current year.

5.—That William Norman, Esq., be selected an auditor of the London and County Banking Company for the current year.

6.—That the thanks of this meeting be given to the Board of Directors for the able manner in which they have conducted the affairs of the company.

7.—That the thanks of the meeting be presented to the auditors of the company for their services during the past year.

8.—That the thanks of this meeting be presented to William McKewan, Esq., the general manager, and also to the principal and other officers of the establishment, for the zeal and ability with which they have discharged their respective duties.

The Chairman having quitted the chair, it was resolved, carried unanimously.—That the cordial thanks of this meeting be presented to William Nicol, Esq., M.P., for his able and courteous conduct in the chair.

Signed, W. CHAMPION JONES, Deputy-Chairman. Extracted from the Minutes. Signed, F. CLAPFISON, Sec.

LONDON AND COUNTY BANKING COMPANY.

Notice is hereby given, that a DIVIDEND on the capital of the company of SIX PER CENT., together with a BONUS of SIX PER CENT., for the half-year ending the 31st December, 1863, will be PAID to the proprietors either at the head office, 21, Lombard-street, or at any of the company's branches, on and after MONDAY, the 15th instant. By order W. M'KEWAN, General Manager. 21, Lombard-street, Feb. 4, 1864.

THE WEST CLIFFORD UNITED TIN AND COPPER MINING COMPANY (LIMITED).

Incorporated pursuant to the Joint-Stock Companies Act, 1862, by which the liability of the shareholders is limited to the amount of their shares.
Capital £200,000, in 4000 shares of £5 each.
10s. to be paid on application, and 10s. on allotment.

DIRECTORS.
FREDERICK M. WILLIAMS, Esq., Goochva, Scorrier, Cornwall.
Col. BUSH, Esq., York-terrace, Regent's Park (Director of the Quebrada Land, Railway, and Mining Company).
T. E. LANNYON, Esq., Kennel Vale, Cornwall.
CHARLES TITIAN HAWKINS, Esq., Oxford.
JAMES WRIGHT, Esq., 12, Cophall-court, Throgmorton-st., London.
THOMAS COOPER SMITH, Esq., 5, Warford-court, Throgmorton-st., London.
FRANCIS PRYOR, Esq., Redruth, Cornwall.
RICHARD MICHELL, Esq., Littlebeale, Redruth.
BANKERS—Alliance Bank, Lethbury.
SOLICITORS—James Bell, Esq., Abchurch-lane.

AUDITORS.
Messrs. Cooper Brothers, Public Accountants, George-street, Mansion House.

BROKERS.
Messrs. Field, Son, and Wood, 9, Warford-court, Throgmorton-street, London, E.C.

"Kerr, Anderson, and Brodie, 132, St. Vincent-street, Glasgow.
"Leigh, Molyneux, and Co., 28, Princess-street, Manchester.
"John Gledhill and Co., Corn Exchange, Leeds.
"Lake Arnold and Co., Small-street, Bristol.

MANAGER—Thomas Cooper Smith, Esq.

OFFICES—5, WARFORD COURT, THROGMORTON STREET, CITY.

The object of this company is to work the Ting Tang, West Ting Tang, South Ting Tang, and Wheel Moyle sets.

This extensive property is situated in the south-eastern declivity of Carn Marth Hill, bounded on the east by the celebrated Clifford Amalgamated Mines, the county cross-course being the boundary or division of the two sets, and in the centre of the most productive group of copper mines in Cornwall. The following extracts from a paper by R. Hunt, Esq., F.R.S., on the Mineral Wealth of Cornwall, will show the immense returns made by some few only of the mines in this district, at a period when the mining interests had not the facilities for working mines they now have. It appears from these extracts that nine mines returned, from the year 1815 to 1850, 1,298,723 tons of ore, of the value of £8,045,990. The whole of the lodes, so rich in the mines referred to, traverse the Ting Tang set, or are to be found parallel north or south within three quarters of a mile.

The granite dipping south-east forms a junction with the clay-slate in the north-west part of the set, which also contains several cross-courses (the principal of which is the great county cross-course, being the eastern boundary), where the junction of strata occurs, and where the lodes intersect the cross-courses, the great deposits of the Gwennap district have been found, some making in the granite, others in the clay-slate, as the following summary will illustrate:—

In Granite.	Dividends.	In Clay-slate.	Dividends.
Tresavean	£454,422	Great Consols and Utd. Mines	£1,109,828
Beauchamp Buller	120,000	(now Clifford Amalgamated)	
Penstruthal	120,000	Unity	330,000
Dannel	250,000	Maid	40,000
Jewel	180,000	Public	200,000
Forland	150,000	West Clifford United (late)	80,000
Trevelyan	200,000	Ting Tang	
Trevelyan Barrier	48,000		
	37,000		

The above mines have been very profitable for many years. The great mass of the ore produced was mostly made between the 150 and 250 ft. levels, whilst no part of Ting Tang has been sunk below the 140 ft. level. There are eight lodes already discovered in the Ting Tang set, all of which have been very productive in the past and the adjoining mines; of these the middle lode should be particularly noticed. East of John's shaft, in the 140 ft. level, there is a good course of ore, and west of the shaft this lode has a most extraordinary appearance; it is 13 ft. wide, composed of gossan, and letting out large quantities of warm water. This gossan is regarded by the miners of the district as the back of large deposits of copper found in the granite beneath.

The prospect of the West Clifford United will bear comparison with any progressive mine in the county. It is surrounded by rich mines. It contains many and productive lodes. It is intersected by several cross-courses and elvans. In it a junction of strata occurs. It has yielded large dividends. It is in comparative infancy. All the shafts and levels are in good repair. All necessary buildings are erected on the mine. It can be worked in a short time, and at a limited expense; in fact, it contains all the elements of success. To develop the West Clifford United Mines it is proposed to sink Roache's engine shaft under the 110, from 20 to 40 fms. deeper, to reach the level from which such profitable returns have been made in the neighbouring mines. Before this depth is attained it is with strong reasons expected the next three lodes south will be together in the shaft; at this point important discoveries are anticipated. It will also be necessary to extend the cross-cuts to intersect the south lode, which lodes have never been sought after in Ting Tang, although they have given great riches in the mines lying east—viz., the Wheel Clifford, Amalgamated, Nanilee, and others.

The late proprietors left the works in good condition, with the surface buildings in their proper places; this will be a saving of many thousands of pounds, and much valuable time to the company. The railway passes through the mine, by which all ores and materials can be conveyed at the cheapest rates.

The reports annexed are from men of long practical experience and a full knowledge of the district. Their testimony as to the highly promising character of the property, and the great local advantages by which it is surrounded, will be read with interest, and leave nothing to be urged by the directors except an assurance of their strong confidence as to its value.

The company has entered into a most favourable arrangement for the purchase of this property for £10,000, and the vendor has consented to take half in cash and half in shares. These terms embrace a lease for 21 years, on highly favourable terms; the benefit of the work already done, the engine and other machinery upon the mine, the plant, houses, materials, &c., which are estimated at great value.

The capital of the company is fixed at £200,000, in 4000 shares of £5 each, but from estimates made by those who have reported upon the mine, a much less sum will place it in a profitable state.

A considerable proportion of the capital has been subscribed for; the directors will proceed with the works as soon as they deem a sufficient number of shares has been applied for.

Plans and sections of the property, with specimens of ore from the mines, may be seen at the offices of the company, where prospectuses, additional reports, and every information may be obtained.

Applications for shares to be made to the bankers, brokers, and manager at the office of the company.

REPORTS ON THE WEST CLIFFORD UNITED MINES.

St. Day United Mines, Nov. 18, 1863.—The West Clifford United (late the Ting Tang Consolidated Mines) are situated in the parish of Gwennap, in the county of Cornwall, in one of the richest mining districts of England, and on the junction of the hills with the granite, where all copper mines in this county have proved most productive. The great county cross-course, which is the western boundary of the well-known Clifford Amalgamated Mines, forms the eastern boundary of this set, and all the noted lodes of those mines pass through its entire length. The parallel lodes to the north are those of East and West Dannel, as well as those of the Great Consolidated Mines, which have yielded hundreds of thousands of pounds profit to the adventurers. When Ting Tang was first-worked, the main operations were confined to three lodes—viz., the old lode, Roache's lode, and the middle lode; the most productive of these was the middle lode, which was worked as deep as the 140 ft. level, and has produced the finest gossan and gossan ore ever found in this county, and the gossan to the west of the engine-shaft is as strong and presents equally as good an appearance at this level as it did at the deep adit. The old lode is also worked as deep as the 140, and is a strong, fine-looking lode in the bottom level. Roache's, or the north lode, is worked as deep as the 110, and produced yellow and grey ore of a very rich quality. There is not a doubt if this mine is sunk deeper, and the levels extended eastward towards the county cross-course, that they could be found again to be very productive. The distance between Roache's lode and the old lode is 40 fms. There are several lodes north and south in this set that have been partially worked at the deep adit level, but nothing has been done below that, so that they might be seen at deeper levels by cross-cutting. I have no doubt that the late adventurers would have done more in this mine had not their eastern boundary been limited; but now they can go as far east as the great county cross-course, and I have no hesitation in saying that I do not know of any piece of ground at present lying dormant that holds out better chances of remunerative success than this. Having been brought up as a tributor from a boy in this mine, I might enter into more details and particulars, but finding that there are other reports of the last working, I deem it unnecessary to do so. I would, however, further remark that a 70 or 80-in. cylinder-engine, with 16-in. pitwork, which would be ample to pump all the water, and a 22-in. steam-whim to draw the stuff, would be all the machinery requisite to work this mine. The late adventurers expended a large amount of money in working the mine; £4000 or £5000 of which will be to the advantage of the incoming shareholders, as they will find the shafts and levels cleared, &c., and the buildings erected necessary for the working of a mine; and it is my firm conviction that £15,000 judiciously laid out will bring this mine into a profitable state, as returns would be made very soon after the water commenced to be forked.

Clarmont, Redruth, Nov. 23, 1863.—In reply to your favour asking for my opinion of the West Clifford United Mines, formerly known as the Ting Tang and Wheel Moyle, I have no hesitation in giving you my opinion that these mines present such chances of success as are rarely to be met with in Cornwall or elsewhere, for the following reasons:—1st. The locality is second to none, being bounded on the east by the rich Clifford Amalgamated Mines, which lodes pass through this set for its entire length, and on the north by Wheel Dannel and West Dannel, the value of which are well known, having been fully tested by the large returns, profits, and dividends that have been realised from them.—2d. Through this set to the east is the large county cross-course, which may be regarded as an important feature, seeing the effect it has produced in all the mines in this locality. I mention this, for your guidance, the boundary, which formerly worked, did not extend so far east as this cross-course, thus preventing them from exploring in this portion of the set.—3d. This mine is situated in the junction of the hills and granite, which has been most productive in this district, and has never been known to fail. Seeing you have so many detailed reports by those who are quite conversant with the underground operations, as well as the position of the property, I presume there is no necessity for my doing so; but I will simply add, it stands sufficiently well in my estimation to induce me to take a good interest in it, and recommend it to my friends.

REPORT OF THE LATE CAPT. WILLIAM MARTIN, FORMERLY MANAGER OF TRESAVEAN AND TING TANG MINES.

In reply to your request, I beg to say that I do not know of any mine in the county of Cornwall, now left unworked, that I could recommend with such certainty of success as Ting Tang. It is situated in the centre of the mining district of Cornwall, and contiguous to the best mines in Gwennap; the lodes of Ting Tang, and those of Beauchamp Buller, Basset, South Frances, Clifford Amalgamated, &c., are the same, while those of Dannel, Consols, Jewel, Maid, and St. Day United are parallel lodes north, and those of Penstruthal, Brewer Trevelyan, Tresavean, and Trevelyan are parallel lodes south. The deepest part of Ting Tang is only 140 fms., while those of Tresavean, Trevelyan United Mines, and Consols are from 250 to 310 fms. deep, and the greatest profits realised from those mines have been below the 150 ft. level. The Ting Tang Consols are in excellent condition to commence working anew, being thoroughly cleared, and well secured to the present bottom. The engine-shaft is sunk and enlarged from the surface to the 110 ft. level; the balance-bob and cistern-plats cut, bearings and cisterns left in their places, and also the ladder-roads, cross-cuts driven at various levels towards

the intersection of various lodes; and immense quantities of useful work done, which cost many thousand pounds to accomplish, and which is entirely beneficial towards a new working. In addition to the above, there is now on the mine a large and well-built engine-house, of full size, for a 70 or 80 in. cylinder engine, a smith's shop, carpenter's shop, sawyer's house, material and store houses, barracks, timber and iron yards, a large counting-house, office, &c., which will greatly facilitate the operations of a future working, and lessen the expenditure to a large amount. There are eight lodes already discovered in the Ting Tang Mine, all of which have produced ore of rich quality; from five of them immense quantities have been raised, and at the present bottom of the mine the great main lode and the middle lode are conjoined, presenting a splendid course of ore for a great length, and the old lode, which is only a few fathoms south, will unite with the above-named lodes at a little more depth, where a large mass of ore will most likely be found. It is my firm opinion, and that of all mine agents and experienced miners who have seen the bottom levels of this mine that, if it is properly conducted, it will yield immense quantities of ore. As so much has been done in clearing and securing the mine, sinking shafts, driving levels, &c., also having so many buildings and erections at the surface, which is so much acquisition towards a future working, it would now only require a good steam pumping-engine, of a 70-in. cylinder, and a steam-whim-engine, of 24-in. cylinder, pumps, rods, and all other requisites to drain the water to the bottom, the whole of which, including labour cost and every incidental expense, would not require more than £9000—if you say £10,000, it will leave ample funds for working capital to get good sales of ore on the market. There is not a mine in Cornwall, as I have before said, that I would prefer to Ting Tang, neither is there any mine of such magnitude that can be brought into operation with so little outlay of capital.

REPORT OF CAPT. THOMAS RICHARDS.
Having been called upon to give my opinion regarding Ting Tang Copper Mine, in the parish of Gwennap, I can say, as being an agent there under my father, that the mine, in my opinion, had very ineffectual trial during that working; the result was that many large shareholders became tired, and relinquished. The shafts and levels being comparatively free from "rubbish," it would be materially in favour of a new company operating in this extensive set, being situated on the junction of granite and clay-slate, surrounded by the most productive mines Cornwall has produced, and just the same depth as the Consolidated Mines were when resumed by the late deservedly esteemed Captain William Davey, which mines yielded the enormous profit of 250,000. The two principal lodes have been very productive, and about Roache's engine-shaft the bottom levels looked very well, and some excellent copper ore left off. The lodes north have been tried very materially, and promise to be productive; whilst the south lodes—two being within 20 fms. of each other, and large returns made from the depth wrought—I think very highly of this part of the speculation, and, as a whole, consider, with the present standard, it is likely to be a largely producing and profitable mine.

REPORT OF CAPT. JAMES ROWE, MANAGER OF NANILEE AND OTHER MINES.
As requested, I have inspected Ting Tang Mine at surface; the following is my opinion thereon:—The situation is good, being west of the Clifford Amalgamated Mines, and embracing all the lodes of that well-known and rich mine. Its geological features are also good; the junction of the granite with the clay-slate takes place in the mine, and the strata are of that character which has produced large quantities of both copper and tin in the adjoining mines. From information that I have received from parties who know the mine, I find the engine-shaft is sunk 110 fms. perpendicular. By sinking this shaft about 30 fathoms deeper, three lodes will be met with at about the point where they will form a junction with each other—a most important occurrence; and there is every probability of large deposits of copper being found at and around the junction of these lodes. The greater part of the mine spent a large sum of money in clearing levels, shafts, &c., which they left in good condition; this will be found a great advantage in working the mine again. A 70-inch cylinder engine will be quite sufficient for the draining of the mine much deeper than it is at present. There is an engine-house and stack already erected, of proper size and in the right place, for effectually draining the mine. I consider this mine a fine piece of mineral ground, and one that I can recommend with confidence.

EAST BRONFLOYD SILVER-LEAD MINING COMPANY (LIMITED).

Capital £10,000, in 5000 shares of £2 each.

The Directors are prepared to allot new shares in this company, bearing a perpetual preference dividend of 20 per cent. to a number not exceeding 1000, as authorised by the company at a special general meeting, held on January 23.

Between 200 and 300 preference shares have been subscribed for by the directors and a few friends, and the remainder will be allotted as applications are received.

Full information and application forms can be obtained of the secretary, at the offices of the company, 1A, Adelphi-terrace, Adam-street, Strand, W.C.

THE LLANDEWIBREFF LEAD MINE COMPANY (LIMITED), CARDIGANSHIRE.

Capital £12,500, in shares of £1 each. Deposit, 10s. per share, future calls not to exceed 10s. per share.

DIRECTORS.
General R. SHORTEDE, Blackheath.

R. FORSTER, Esq., Queen's-road West, Regent's-park.

E. EDWARDS, Esq., C.E., Adelphi.

MOFFATT C. W. HORNE, Esq., Guildford-street, Russell-square.

(With power to add.)

BANKERS—Metropolitan and Provincial Bank, Cornhill, E.C.

SOLICITOR—A. Fulford, 31, Threeland-street, E.C.

SECRETARY—Mr. G. F. Goodman.

OFFICES—7, GEORGE YARD, LOMBARD STREET.

This company will have the advantage of commencing work, immediately upon entering possession, on a mine already opened and producing ore, and completely stocked with ample machinery of every kind for crushing, pumping, winding, &c., the whole of which is entirely new, and has indeed, never been worked of the favourable results obtained in opening out the mine; but in consequence of differences among the shareholders, it was determined to dissolve that company, even before the machinery, just completed, had been started. Several of the shareholders, however, having perfect confidence in the immediate success of the undertaking, have determined to rework it as a new company, rather than allow so valuable and advanced a mine to be abandoned at its most important stage, after the expenditure of many years' work and some thousands of pounds, and the present company is accordingly formed.

The extent of the work already done will be seen from the accompanying recent reports:—It includes principal shaft, sunk to a depth of about 20 fms., and provided with ladders, pumps, winding and other gear, and all requisites. Levels have been driven (including a very long adit level), from which, without the aid of any machinery, nearly 20 tons of lead ore, in purity equal to any in the world, has been raised; whilst good and profitable courses of such ore are reported to be now standing, and at once available for the working of the mine, and the driving of fresh levels, and on which work can be commenced the very day of taking possession.

Comparing the quantity of ground broken with the quantity of ore raised, it seems certain, even from the lowest estimates, that the mine may be worked at a profit, whilst if the richness of the ore now said to be available continues, and if the reports of those who have lately seen the mine, and speak so highly of it, be at all justified, that profit must be great, and to bring about this result will, it is estimated, require an outlay of less than £200, from the fact that all the unproductive work has already been done, all the unproductive shafts and levels have been opened, and all the capital required for the erection and completion of machinery, watercourse, &c., has already been spent.

This company purchases the entire property on a lease, leaving 21 years unexpired, at the very low royalty of 1-16th, for £4000 (a very much smaller amount than the necessary works already completed have cost), £1000 being in cash by instalments, and the remainder in paid-up shares, so that the total amount of capital on which dividends will be payable may, probably, be under £5000, whilst these dividends will be speedy, and in all cases very large.

The neighbouring mine, the Nant-y-Mwyn, of a similar character to this, is said to have sold ore to the extent of about three millions sterling, to have paid nearly one million in dividends, and to be still returning a profit of about £10,000 per annum; a sufficient proof of the richness of the district.

The company will be registered under the Articles of Association prescribed by Table A of the Companies Act, 1862; and there will be no promoters' fund, nor any charge whatever upon the company beyond the absolute expenses incurred in formation; and when sufficient shares have been subscribed, the company will be ready to commence the working of the mine, and reports will regularly be published in the Mining Journal, and all information received at once made available to every shareholder.

Specimens of ore, reports, &c., may be seen at the offices, where forms of application may be obtained from the secretary, to whom, when filled up, they must be forwarded.

London, Oct. 12, 1863.—I have been down the Brynabon Mine, and carefully examined every part which was open. First, I went down to the adit level, then into the winze, 6 fms. below, where I saw a fine lode, which had been partly worked upon, in places from 12 to 13 ft. in width, from which I cut some fine stones of lead ore; the ground seems to be of a soft kindly kilas. I consider the pitches on this lode will produce from 10 to 15 cwt. of lead per fm., and may be worked at 16s. per fm.; the lodes seems to bear lead throughout, and is likely to improve. From here I came up the winze and went down the engine-shaft 13 fms., where I saw a lode that had been driven up to the west a distance of 6 fms. I would recommend the continuation of this level, as I consider the large quantity of water produced in the lode, from the heating side, to be a good indication; the lode is 2½ ft. wide, with a few spots of lead in it. A level has also been driven east from shaft 10 fms. upon the same lode, the end of which is close and unproductive; in this level, 25 ft. from the shaft, another level has been driven a distance of 12 fms. on a branch lode; this is connected to the main level by a cross-cut, at the end of which a winze has been sunk on the lode. I was told by one of the miners who worked there that the lode in the winze will produce 30 cwt. of lead per fm., but as it was full of rubbish from the stopes above, I was unable to see it. There is a quantity of lead lying at the bottom of the shaft ready for raising and dressing. When I came to surface I went with one of the miners, who pointed out a lode which had produced several tons of lead ore in a few fathoms; this lode is running 20° north of east, so that to the west you may calculate a long length of productive ground. The pumps in the shaft work well and easy, the water-wheels are in good condition, and by working half-time are complete masters of the water. The crushers and floors are well laid out, and in capital condition. I would recommend your sinking the engine-shaft 10 fms. deeper, (which may be done for £11 to £12 per fm., including all expenses), and the driving out of the levels east and west, and on the branch going north-east; when this is completed, it is my opinion you will have a large body of lead ore before you, upwards of 120 fms. in length of a rich lode. This mine, if properly worked, is likely at a small outlay to be a very profitable one.

C. W. RAMSDEN.
Extract from a letter from CAPT. MATTHEW FRANCIS, dated Sep. 15:—"I am quite satisfied, if the men were paid, the mine could make 8 tons of ore per month, leaving £20 to £30 profit. I never before was connected with a company that would not stretch a point to accomplish such an easy undertaking."

FOR SALE, A HORIZONTAL HIGH-PRESSURE ENGINE, which is quite new, but not required, 16 in. cylinder, 3 ft. stroke, complete to end of fly-wheel, shaft, and fitted with governor and fly-wheel. Price, £150, delivered within 30 miles of Swansea.—Apply to "G." Box 40, Post-office, Swansea.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the GREAT NORTH TOLGUS MINING COMPANY (LIMITED).—The Registrar of this Court has APPOINTED SATURDAY, the 15th day of February next, at TRURO, to SETTLE the LIST of CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made out and deposited at the said office.
WILLIAM MICHELL, Registrar of the said Court.
Dated this 10th day of January, 1864.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the CARN VIVIAN MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted are hereby required to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's Office, Truro, on or before the 12th day of February inst., or in default thereof they will be excluded from the benefit of any distribution made before such proof. And for the purpose of such proof they are either to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the Court at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the superior Courts lawfully authorised to take and receive affidavits and affirmations.
WILLIAM MICHELL, Registrar of the above-named Court, Truro, Cornwall.
Dated February 4, 1864.

IN THE MATTER OF THE COMPANIES ACT, 1862, and in the MATTER OF THE DEVON UNION MINING COMPANY (LIMITED).—The CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 24th day of February inst., to SEND THEIR NAMES and ADDRESSES, and the PARTICULARS of THEIR DEBTS and CLAIMS, and the NAMES and ADDRESSES of THEIR SOLICITORS (if any), to Mr. GEORGE A. CAPE, of No. 3, Adelaide-place, in the City of London, Accountant, the liquidator of the said company, or in default thereof they will be excluded from the benefit of any distribution that may be made.
GEORGE A. CAPE, Liquidator.
Dated the 3d day of February, 1864.

MINE MATERIALS AT SOUTH TRESAVEAN MINE FOR SALE.

MR. JOHN BURGESS, Burncoose Farm, near Redruth, is instructed to SELL the whole of the MATERIALS belonging to the SOUTH TRESAVEAN MINE, at PONSANOOT, three miles from Penryn, and four miles from Redruth stations, on Tuesday, the 9th day of February next, at Eleven A.M., in one or more lots, as may be decided on at the day of sale; if not sold in one lot, they will be sold in lots to suit the convenience of purchasers. Terms cash, subject to 2½ per cent. discount.

WATER WHEEL, 30 ft. diameter, 4 ft. breast, iron centre piece, iron axle, iron frame and buckets, and two cranks.
170 fms. launders, 3 ft. 6 in. wide, 1 ft. deep.
2 in. and 1½ in. timber and stands.
New 53 ft. deal shears, and 2 pulleys complete.
136 fms. of 2 in. best iron flat-roads, with faggoted joints, pins, and couplings.
New 8 arm capstan, oak axle and iron centre piece.
50 fms. ¾ in. capstan chain.
10 fms. ¾ in. ditto.
60 fms. ¾ in. winch chain.
26 fms. ¾ in. winch chain.
15 fms. 9 in. ditto.
30 fms. 1½ in. winch rope.
Balance bob, with faggoted strapping plates.
Bearing blocks and brasses complete.
8 pairs 6 in. faggoted strapping plates.
3 sets 6 in. and 4½ in. faggoted strapping plates.
19 fms. 18 in. 9 ft. pumps.
12 in. 11 and top doorpiece.
6 ft. 12 in. windrope.
11 ft. 12 in. plunger pole and stocking.
11 ft. 13 in. pole case.
1 12 in. stuffing box and gland.
Hand and wheelbarrows, sieves, tackle trees, one pair of lifting screws, tallow, anti-friction grease, 1½ cwt. powder, 50 coils fuse, smiths and miners' tools, shovel and pick bits, powder-scoops and weights, carpenter's bench, miners' chests, shovels, sundry rope, one thwart saw, two hand saws, leather, engine shaft, small grindstone, two good wood sheds, quantity of new and old timber. Account-house furniture.
Dated January 25, 1864.

TO COLLIERY PROPRIETORS, CONTRACTORS, IRON DEALERS, BROKERS, EXTENSIVE SALE OF COLLIERY PLANT, and alterations consequent upon the EXTENSION OF BLACK PAIK COLLIERY, CHIRK, DENBIGHSHIRE.

MR. EDWARD HILL has been favoured with instructions to SELL BY AUCTION, on Wednesday and Thursday, the 17th and 18th days of February, 1864, at the above-named colliery, at Twelve o'clock at noon of each day, a portion of the VALUABLE COLLIERY PLANT, including TWO WINDING ENGINES; TWO SETS OF WINDING APPARATUS, with ropes and head-gearing; ONE DITTO, with necessary apparatus for working tramways; FOURTEEN BOILERS, of various sizes; some hundred tons of wrought-iron angle rails, plates, &c.; a large quantity of wrought-iron tram-wagons; two 5 ton weighing-machines, together with various other colliery utensils, now in use at the above-named colliery. Also twelve powerful draught horses, two ponies, three cows, several hundred measures of barley, wheat, and potatoes, winnies, winches, and sundry small goods. Catalogues are now ready, and may be had on the premises, or from Mr. EDWARD HILL, the auctioneer, Rochdale, Lancashire.

TO IRONMASTERS, IRON SHIPBUILDERS, ENGINEERS, &c.—BY PRIVATE SALE, ON THE RIVER TYNE, FORTY EIGHT ACRES OF FREEHOLD LAND, in the parish of WALLSEND. It is unsurveyed for situation, having a large and deep water frontage to the river, and is intersected by the Tynemouth branch of the North-Eastern Railway. There is a large manna-house, cottages, offices, &c., on the ground, clay for brickmaking, &c.—For particulars, apply to Mr. J. THOMSON, 5, Dean-street, Newcastle-upon-Tyne.

TO IRONMASTERS, CAPITALISTS, &c.—FOR SALE, BY PRIVATE CONTRACT, A COLLIERY in MONMOUTHSHIRE, producing superior house and coking coal. Ovens are erected for coking small coal, and coks of a superior quality is made and readily disposed of at a good price in Staffordshire and the Midland district. The colliery is situated, having ready access to Newport and the West Midland Railway.—For particulars, apply to "S. A." Mining Journal Office, 26, Fleet-street, London, E.C.

HEMATITE IRON ORES.—TO BE GRANTED, on reasonable terms, an EXTENSIVE PROPERTY, which contains some VALUABLE LODES of IRON ORE of good quality. These lodes have not been worked on, and are situated on the Cornish coast, within a short distance of a shipping port. Freight will not exceed 2s. 6d. per ton. No deed will be required for twelve months, until the value of the property is ascertained. Any other particulars can be obtained by applying to "H. J." Mining Journal Office, 26, Fleet-street, London, E.C.

TO CHARCOAL IRON SMELTERS.—TO BE DISPOSED OF, A FURNACE and MACHINERY, calculated to make 20 tons per week, with about 400 tons charcoal, with minerals, &c., for the working of it, at a convenient distance, and bordering on the South Wales Railway.—For particulars, apply to Mr. THOMAS FRANCIS, engineer, Fencoe, near Bridgend, Glamorgan-shire.—Jan. 19, 1864.

TO CAPITALISTS.—THE PROPRIETORS of a COLLIERY in full work, and now producing upwards of 100,000 tons of the best bituminous coal per annum, are DESIROUS of DISPOSING OF THE LEASE they hold. The quantity now worked may be doubled without extra expense, if required. The property is situated within 15 miles, by rail, of the port of Cardiff.—Particulars may be obtained of D. RANDALL, Esq., solicitor, Neath.

TO TIN-PLATE MANUFACTURERS, IRONMASTERS, &c.—TO BE LET, for a term of years, or as may be agreed, with immediate possession, the EXTENSIVE TIN-PLATE IRONWORKS, known as the LLEWISTON TIN-PLATE WORKS, and SEATON IRONWORKS, situated near WORKINGTON, in the county of CUMBERLAND, and in the centre of the hematite iron district.

The works include the whole of the erections, FURNACES, MACHINERY, PLANT, and TOOLS requisite for the manufacture of tin-plates and sheets on a large scale, the rolls, shears, &c., being driven by a 60 horse power STEAM ENGINE, and the whole being in the most complete and efficient working order, and capable of producing 800 boxes of tin-plates per week.

The mills might, with a little alteration, be adapted for rolling boiler plates and bars.

There is an unlimited supply of water-power, with several wheel races, one of which is occupied by a powerful water-wheel.

Adjoining the premises are a commodious family residence, with large garden, a manager's house, and twelve workmen's cottages.

Coal, iron ore, limestone, &c., abound in the neighbourhood, and the works are connected with the Cockerthorpe and Workington Railway by means of extensive sidings.

For further particulars, apply to Mr. HENRY FLATCHER, of the Lower Ironworks, near Whitehaven; or to Mr. JAMES LUM, Whitehaven.

Whitehaven Castle, Jan. 18, 1864.

VALUABLE BEDS OF COAL.—TO BE LET, ON LEASE, the FOLLOWING VALUABLE BEDS OF COAL, under about 300 acres of the Stanley Hall Estate, near Wakefield, viz.:—THE CROW COAL, the SHALE COAL, the STANLEY MAIN, and the HAIGH MOOR. The Aire and Calder Navigation passes through the estate, which is 1½ m. from Wakefield.—For particulars, and to apply to Mr. JAMES WHITMAN, solicitor, Wakefield.

THE CONTRACT CORPORATION (LIMITED).

Incorporated under the Companies Act, 1862.
Capital £4,000,000, in 40,000 shares of £100 each.
DIRECTORS.
WM. LATHAM BAILEY, Esq. (Bailey Brothers and Co.), Liverpool.
W. MONTAGUE BAILEY, Esq. (Bailey, Baillie, Cave, and Co.), Old Bank, Bristol.
ANTHONY KINGDON BAKER, Esq., Director of the Great Western Railway Company.
GEORGE S. BEECROFT, Esq., M.P., Director of the London and North-Western Railway Company.
JOSEPH BOYCE, Esq., Director of the Royal Bank of Ireland, and the Midland Great Western Railway Company, Dublin.
THOMAS DAKIN, Esq., in the parish of Michaelston-super-Afon, in the county of Glamorgan, and consists of more than 1000 acres; and is most conveniently situated within 5½ miles from Britton Ferry Dock, and the important ironworks in this neighbourhood.
At a very moderate estimate, it is calculated that this estate contains about 8000 tons of ironstone in each acre of ground, which, after making the usual deductions for faults, waste, &c., would give about 9,000,000 tons in the whole estate, equivalent to an out-put of 200 tons per day, or 60,000 tons per annum for 152 years.
It is calculated that not more than half of the capital will be required.
With regard to profits, it may be safely reckoned at 2s. 6d. per ton net, and this, upon an out-put of 200 tons per day, would yield a dividend of 20 to 25 per cent. upon the amount of capital proposed to be called up; this is without allowing for the profit upon manufactured pigs.
No promotion money will be paid by the company.
All the preliminary expenses, except law charges, up to the date of allotment, are, by agreement, not to exceed £500.
Should no allotment be made, all deposits will be returned, free from any deduction.
The Articles of Association of the company contain no unusual clauses, and can be seen at the offices of the company.
Full prospectuses and forms of application for shares can be obtained from the secretary.

THE GLAMORGAN IRON ORE COMPANY (LIMITED).

Capital £40,000, in 8000 shares of £5 each.
Deposit, 10s. on application, and 20s. on allotment.
Thirty days' notice of call, which will not exceed £1 per share.
Registered under the Companies Acts. Each member's liability limited to the amount of his subscription.
DIRECTORS.
JOSEPH ATWELL, Esq., 13, Campden Hill Villas, Kensington. [Wales]
JAMES BANCKS, Esq., 32, Bucklersbury, and Broxbourne.
D. HOUGHTON, Esq., Newhall-street, Birmingham; and Fforddwm, Neath, South Wales.
WILLIAM HUTCHINSON, Esq., Cannon-street, London.
HENRY PHILLIPS, Esq., 10, Buckingham-gate, St. James's Park.
WILLIAM GIBSON, Esq., 40, Broad-street-buildings.
BANKERS—The Alliance Bank of London and Liverpool (Limited), Lothbury.
Secretaries (pro tem.)—Mr. Follwood.
TEMPORARY OFFICES, 41, LOMBARD STREET, LONDON.

This company has been formed for the purpose of purchasing a long lease of and working a very valuable deposit of argillaceous iron ore.
The estate is situated in the parish of Michaelston-super-Afon, in the county of Glamorgan, and consists of more than 1000 acres; and is most conveniently situated within 5½ miles from Britton Ferry Dock, and the important ironworks in this neighbourhood.
At a very moderate estimate, it is calculated that this estate contains about 8000 tons of ironstone in each acre of ground, which, after making the usual deductions for faults, waste, &c., would give about 9,000,000 tons in the whole estate, equivalent to an out-put of 200 tons per day, or 60,000 tons per annum for 152 years.
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The Articles of Association of the company contain no unusual clauses, and can be seen at the offices of the company.
Full prospectuses and forms of application for shares can be obtained from the secretary.

MESSRS. C. SCHIELE AND CO. ENGINEERS,

INVENTORS, PATENTEES, AND SOLE MANUFACTURERS OF
SCHIELE'S PATENT TURBINE WATER WHEELS OF 1863.
SCHIELE'S PATENT SILENT FANS OF 1863.
SCHIELE'S PATENT CENTRIFUGAL PUMPS OF 1863.
SCHIELE'S PATENT BLAST AND VENTILATING ENGINES OF 1863.
SCHIELE'S PATENT TURBINE STEAM ENGINES OF 1863.
SCHIELE'S PATENT MARINE VENTILATORS OF 1863.
SCHIELE'S PATENT MINE VENTILATORS OF 1863.
SCHIELE'S PATENT EXHAUSTERS OF 1863.
SCHIELE'S PATENT COMPOUND FANS OF 1863.
SCHIELE'S PATENT COMPOUND BLAST ENGINES OF 1863.
SCHIELE'S PATENT GOVERNOR OF 1863.
SCHIELE'S PATENT WAVE POWER MACHINERY OF 1860.
SCHIELE'S PATENT CRUSHING MILLS OF 1860.
WORKS, CHORLTON WORKS, COPLAND STREET.
OFFICES, 2, CLARENCE BUILDINGS, BOTH STREET, MANCHESTER.
ALL MACHINERY ERECTED BY US GUARANTEED.

The following is copied from the "Manchester Examiner and Times," Oct. 21, 1863:—
SCHIELE'S WATER TURBINE.—A remarkably ingenious improvement has been effected by Messrs. C. Schiele and Co. of this city, in the invention of the water turbine, or wheel. Wherever a stationary engine is fixed a water turbine may now take its place, effecting an entire saving of coal and engineering, besides taking away all risk from fire or explosions. They are so compact that one, measuring 4 in. by 3 in. deep, will work a large organ, by being fixed in the ordinary way to the water-pipe. The water pressure during the day in Manchester, by the Corporation Waterworks, is equal to 47 lbs. to the square inch, and at night it is 70 lbs. to the square inch; here, then, is a motive-power applicable to many purposes to which it has never yet been applied. The power of the turbines varies from that of a boy to that of 1000 horses and upwards. From the peculiar construction of the turbines, also, it is impossible for them to become choked with leaves or sticks, as is the case with most other turbines. Several small ones are fixed, and are working machines of various sorts in Manchester, and the demand for them is so great that they bid fair to supplant the major portion of the stationary engines now in use, where a cheap supply of water can be had. They are applicable for domestic, commercial, and agricultural purposes, and may be placed in drawing, dining, breakfast rooms, or cellars; they are always ready for work, and may be set going or stopped at any moment by simply turning a tap. They will work printing presses, printing-machines, coffee mills, tobacco-cutting machines, fans, threshing-machines, hoists, and drive hydraulic presses. The size of the little machines, which may be fixed in the hand and the work they do, are in remarkable contrast, and it is only by seeing one at work that its real importance and value can be appreciated. Several of them may thus be seen by applying at the offices of Messrs. SCHIELE and Co., Clarence-buildings, Both-street.
For other opinions of the press see "Manchester Guardian," Oct. 13, 1863; "Manchester Courier," Oct. 24, 1863; "Salford Weekly News," Oct. 24, 1863; "Preston Guardian," Oct. 24, 1863.

NICKEL AND COBALT REFINING, AND GERMAN SILVER

WORKS, 16, OZZELL STREET NORTH, BIRMINGHAM.
STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—
REFINED METALLIC NICKEL. OXIDE OF COBALT. [WIRE, &c.]
REFINED METALLIC BISMUTH. GERMAN SILVER—IN INGOTS, SHEET
NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND

CHEMICAL WORKS.
NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.
JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.
Reference.—Professor Miller, King's College, London.

MR. GEORGE SHEPHERD, CIVIL, MINING, AND

CONSULTING ENGINEER.
Letters addressed 26, Throgmorton-street, London, E.C.

CARDIGANSHIRE MINING OFFICES.

MESSRS. WILLIAMS, BRAY, AND CO. beg to inform their mining friends and the public generally that, in consequence of the numerous applications and requests they have received, they now UNDERTAKE THE INSPECTING AND REPORTING ON MINES.
The several members of the firm having had many years' experience in mining in all its branches is the best guarantee of their ability in such matters; and they trust that, by carefully examining the mines they visit, and faithfully reporting thereon, and by constantly watching the progress of both old and new undertakings, they will be able to supply what has been greatly felt in the district, and give every information and advice that may be required.
OFFICES, 41, MARINE TERRACE, ABERYSTWTH.

BRITISH AND FOREIGN STOCK, SHARE,

AND MINING OFFICES, No. 2, WINCHESTER BUILDINGS, GREAT WINCHESTER STREET, LONDON, E.C.

Messrs. FULLER AND CO. continue to BUY AND SELL EVERY DESCRIPTION OF SHARES IN BANKS, CANALS, MINES, RAILWAYS, AND GOVERNMENT STOCK, either for money or account. Stock Exchange business effected upon the usual commission.

Capitalists who seek safe and profitable investment will find that mines afford a wider range for profit than any other public security, and pay dividends quarterly from 12½ to 20 per cent. per annum. Progressive mines frequently advance hundreds per cent. in value.

Messrs. FULLER and Co. having channels for the disposal of shares comprised in the miscellaneous list, invite the holders to deposit the same with them; and having had upwards of 20 years' experience in the mining market, are prepared to advise as to the purchase of shares for an early advance in price, and for becoming a safe and remunerative investment.

Telegraphic messages promptly attended to, and every information supplied, either personally or by letter. Office hours, from Ten to Four o'clock.

Bankers: The Metropolitan and Provincial, Cornhill.

SOUTH AUSTRALIAN MINE AGENCY.—MR. J. B. AUSTIN,

Author of the "Mines of South Australia," has COMMENCED BUSINESS IN ADELAIDE as a MINE AGENT and SHAREBROKER, and will be happy to furnish detailed reports on any of the mines, and to give the fullest and most reliable information respecting them.—Address, Mr. J. B. AUSTIN, Adelaide, South Australia.

TO CAPITALISTS.—MESSRS. LEICESTER AND CO.,

INSPECTORS AND VALUERS OF MINES, &c., MELBOURNE, VICTORIA, OFFER THEIR SERVICES TO SELECT AND INVEST CAPITAL IN MINING PROPERTIES, for which they charge 2½ per cent. and they also COLLECT and TRANSMIT THE DIVIDENDS, charging 2½ per cent. on their amount. Messrs. LEICESTER and Co. earnestly call the attention of capitalists to the many opportunities they possess of investing, to pay from £50 to £150 per cent. per annum. Sums under £50 will be charged extra. All remittances must be made through our agent, Mr. RICHARD MIDDLTON, Mining Journal Office, 26, Fleet-street, London; or direct through our bankers, the Union Bank of Australia.

NICHOLLS, WILLIAMS, AND CO. ENGINEERS,

BEDFORD IRONWORKS, TAVISTOCK.
MANUFACTURERS OF STEAM ENGINES OF EVERY DESCRIPTION, made on the BEST AND NEWEST PRINCIPLES. We beg most especially to call the attention of the public to the manufacture of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS OF EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON AND HEAVY SHAFTS OF ANY SIZE. CHAINS made of the best iron, and warranted. RAILWAY WORK OF EVERY DESCRIPTION.
ALL ORDERS FOR ABROAD RECEIVE THEIR BEST ATTENTION. NICHOLLS, WILLIAMS, AND CO. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.
Messrs. NICHOLLS, WILLIAMS, AND CO. have always a LARGE STOCK OF SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

MESSRS. W. DERRY AND CO., MINING MATERIAL

MERCHANTS, ST. AUUSTELL, respectfully inform the mining public that they have constantly ON SALE EVERY DESCRIPTION OF MINING PLANT, IN STEAM ENGINES, pitwork, and dressing appliances, which they are prepared to offer on very advantageous terms, and such as will especially commend themselves to the projectors of new undertakings.—Applications to be addressed as above, or to the engineer of the company, Mr. W. H. GRAY, St. Austell.
Dated St. Austell, August 12, 1863.

WILLIAM MATHEWS, ENGINEER, TAVISTOCK,

has FOR SALE:—ONE 30 in. CORNISH PUMPING ENGINE, with BOILER 4½ tons; ONE 14 in. HORIZONTAL WHIM ENGINE and cage, with BOILER 4½ tons; TWO 10 horse PORTABLE ENGINES, for winding or pumping; ONE CORNISH CRUSHER; ONE 30 in. diameter WATER WHEEL, 9 ft. breast, iron axle, sockets and rings; 60 fms. of 2 in. flat-rod, with pulleys.

WEST AND SONS, MANUFACTURERS OF ALL KINDS OF

STEAM PUMPING AND MINING MACHINERY.
ST. BLAZEY AND ST. AUUSTELL FOUNDRIES, HAMMER MILLS, &c., PAR STATION, CORNWALL.

WEST'S PATENT VALVE, suitable for PUMPING ALL KINDS OF LIQUIDS and GASES, and as an AIR PUMP VALVE is UNRIVALLED for its SIMPLICITY and EFFICIENCY.

For particulars, prices, &c., apply as above, or to Messrs. PHILLIPS and DARRINGTON, Moorgate-street Chambers, Moorgate-street, London, where models may be examined.

RAILWAY CARRIAGE COMPANY (LIMITED).

ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.

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Passenger carriages and wagons built, either for cash or for payment over a period of years.

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WORKS, SHEFFIELD, SOLE MANUFACTURERS OF HOWELL'S PATENT HOMOGENEOUS METAL PLATES FOR BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING THE STRENGTH OF STEEL WITH THE MALLEABILITY OF COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. McCONNELL'S PATENT HOLLO'W RAILWAY AXLES.—For prices and terms, apply to SHORTBRIDGE, HOWELL, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY and Co., 12, Haymarket, London.

ANTI-FRICTION METAL.—THE ANTI-FRICTION METAL

(Locomotive Brand) MANUFACTURED BY THE UNDERSIGNED will be found a MOST EXCELLENT MATERIAL for MACHINERY BEARINGS, &c. Price, 9d. per lb.

WM. PENN SMITH, 28, HANOVER STREET, LIVERPOOL.

COAL CUTTING MACHINERY.—

The WEST ARDSLEY COMPANY, having, by recently patented improvements, perfect and efficient machinery, which is now READY TO MAKE CONTRACTS FOR THE CONSTRUCTION AND USE OF THE MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN THE COST AND IMPROVE THE AVERAGE SIZE OF THE COAL, TO LIGHTEN THE LABOUR, and also TO MODIFY THE SANITARY CONDITION OF THE MINE.

All communications to be made to Messrs. FINLAY, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—THE WEST ARDSLEY COMPANY, having reason

to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, OR USE ANY MACHINERY in the construction of which any such INFRINGEMENT IS MADE.

IMPORTANT TO MINING.

MESSRS. SMYTH AND WASLEY'S PATENT PREPARATOR FOR SPALLING AND SEPARATING THE ORE FROM THE STONE.

Agent:—Mr. RAWLE, Patent and Mining Agent, 14, Clare-street, Bristol, where model may be seen, and particulars obtained.

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FOR REMOVING AND PREVENTING INCORUSTATION IN STEAM BOILERS, LAND AND MARINE.

P. S. EASTON AND G. SPRINGFIELD, Patentees and Sole Manufacturers, 37, 38, and 39, WAPPING WALL, LONDON, E.

Or of their Agents in the principal towns of Great Britain and the Colonies.

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WASHING MACHINE.—This is by far the MOST ECONOMICAL, as well as the MOST PERFECT MACHINE MADE. Each machine is capable of washing 25 to 50 tons per diem, according to quality.—Full particulars, testimonials, &c., may be obtained from E. EDWARDS, Esq., C.E., 1, York-buildings, Adelphi, where a working model may be seen.

TO INVENTORS.—ALL INTENDING PATENTEES should

PROCURE THE PRINTED INFORMATION regarding PATENTS, their COST and the MODE OF PROCEDURE to be adopted, ISSUED GRATIS by the GENERAL PATENT COMPANY (LIMITED), 71, FLEET STREET, LONDON.

R. MARSDEN LATHAM, Sec.

CORNISH CRUCIBLE AND BLACK-LEAD POT MAKER,

JOHN JULEFF, FORE STREET, and PEDN-AN-DREA, REDRUTH.

NEW COMBINED TURBINE, WINDING, AND

PUMPING MACHINERY.

MANUFACTURED BY GEORGE LOW, MILLGATE IRONWORKS, NEWARK-UPON-TRENT.

Who respectfully begs to bring the above to the notice of the mining public, as an exceedingly cheap and easy method of applying water-power for the above purposes.

The TURBINE, WINDING, and PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 33 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary.

G. Low begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes.

MANUFACTURER OF WINDING, PUMPING, CRUSHING, STAMPING AND MINING MACHINERY.

IMPROVED TURBINE WATER WHEELS CONSTRUCTED EITHER TO WORK VERTICALLY OR HORIZONTALLY, and upon the MOST SCIENTIFIC and EFFECTIVE PRINCIPLE.

G. Low begs to recommend a special class of turbine adapted for extreme high falls (200 to 500 ft.), and consuming small quantity of water. This turbine will work with equal advantage without running at an excessive velocity. Also, MANUFACTURER OF IMPROVED BOKING MACHINES FOR DRIVING ADITS.

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FOR PREVENTING IRON FROM RUST, AND WOOD FROM DECAY.

BRILLIANT JET BLACK, SUPERIOR TO PAINT IN

APPEARANCE, dries in less time, contains preservative qualities of the best description, and is economical in its use; one gallon, at 1s., is equal to 14 lbs. of paint, which costs 4s.

For COLLIERY HEAD GEARING, RAILWAY WAGONS, BOILERS, CASTINGS, CANAL BOATS, &c., it is especially adapted. In casks containing 10, 15, and 20 cwts. each. In quantities of 1 ton and upwards, price £11 per ton.

PETROLEUM.

This oil gives a pure, white, soft, and brilliant light, easily regulated, portable, and is half the price of colza, rape, seal, &c. The light of an ordinary burner with this oil is equal to eight sperm candles, and no grease. Messrs. Glover and Co. have had great experience in sampling, and making the guarantee prime article. For works of public buildings, where gas is not desirable, the brilliancy and economy of the article are unequalled. Sold in iron-bound casks of 30 gallons.

WASTE NO OIL.

STRONG IRON OIL CISTERNS. From 600 gallons, 48 diameter by 84 in height, price £10 10s., down to 10 gallons, 15 diameter by 21 in height, price 15s., with EVERY VARIETY OF SIZE AND PRICE BETWEEN.

STRONG IRON BUCKETS:—2½ galls. .. 4s. 6d. 3 galls. 5s. 0d. 3½ galls. 5s. 6d. 4 galls. 6s. 0d.

WAGON GREASE.

TURPENTINE SUBSTITUTE, 3s. per gallon, in 30-gallon casks.

GLOVER AND CO., No. 40, MANESTY LANE, LIVERPOOL.

ASSAYS AND ANALYSES UNDERTAKEN AT MODERATE

CHARGES, by MR. ARTHUR EVANS, LECTURER ON CHEMISTRY, NORMAL COLLEGE, SWANSEA.—Facts to be directed Mr. A. EVANS, 12, High-street, Swansea.

Tavistock Ironworks, Devon.—(Established 1804.)

GILL AND CO., ENGINEERS AND IRONFOUNDERS, MANUFACTURERS OF STEAM ENGINES AND BOILERS. CHAINS OF ALL DIMENSIONS. STEELED SHOVELS of any pattern. EVERY DESCRIPTION OF CAST AND HAMMERED IRON for MINING, MANUFACTURING, and AGRICULTURAL PURPOSES. HAMMER MILLS. EDGE TOOL MANUFACTORY. FOREIGN MINES SUPPLIED ON LIBERAL TERMS. VARIOUS DESCRIPTIONS OF SECOND-HAND MACHINERY CONSTANTLY ON HAND.

N.B.—AGENTS FOR TANGY'S PATENT HYDRAULIC LIFTING JACK, and WESTON'S PATENT DIFFERENTIAL PULLEY BLOCKS.

International Exhibition, 1862.

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For "Good arrangement, good workmanship, and practical success."

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ENGINEERS

MANUFACTURERS OF PORTABLE and FIXED STEAM ENGINES, MACHINERY FOR PUMPING, HOISTING, GRINDING, SAWING, and AGRICULTURAL PURPOSES, &c., adapted for any part of the world.

STAMP END WORKS, LINCOLN; and 78, LOMBARD STREET, LONDON.

Descriptive, illustrated, and priced catalogues free per post.

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EDGE AND SON,

MANUFACTURERS OF IMPROVED FLAT AND ROUND CHAINS AND WIRE ROPES, or MINING PURPOSES.

BOUKS, KIBBLES, BOILERS, IRON BLOCKS, and BLOCK CHAINS.

RAILWAY COUPLINGS, HORSE TRACES, CRANE CHAINS, and SHIP'S CABLES.

MANUFACTORY, COALPORT, SHROPSHIRE.

Prize Medal, International Exhibition, 1862.

AVELLING AND PORTER'S PATENT TRACTION

ENGINES AND LOCOMOTIVES FOR MINERAL RAILWAYS.

For prices, illustrated description, and testimonials, apply to AVELLING and PORTER, engineers, Rochester, Kent.

Exhibition Medal, 1862.

WEIGHING MACHINERY,

CONSISTING OF PLATFORM WEIGHING MACHINES and HIND'S PATENT RAIL and ROAD WEIGHBRIDGES, overhead TRAVELLING WEIGHING CRANES and CRABS, RAILWAY WEIGHING TURNABLES, &c.

CRANES

Of the WALL, PILLAR, PORTABLE, or TRAVELLING KINDS; and CRABS and WINCHES for STEAM or HAND POWER, &c. Also, TURNABLES, WATER COLUMNS, TANKS, and PUMPING MACHINERY, and GENERAL RAILWAY PLANT, manufactured by

RICHARD KITCHIN, ENGINEER AND IRONFOUNDER, SCOTLAND BANK IRONWORKS, WARRINGTON.

Prize Medal Awarded Great Exhibition, 1851, and

International Exhibition, 1862.

PATENT SAFETY FUZE WORKS, TUCKINGMILL,

CORNWALL.—We beg respectfully to inform the public that since the decease of the late Mr. THOMAS DAVEY this firm has consisted of JOHN SOLOMON HICKFORD, GEORGE SMITH, FRANCIS PRYOR, SIMON DAVEY, and WILLIAM HICKFORD SMITH. It is requested that all letters may be addressed, and all cheques and drafts made payable to us, as

HICKFORD, SMITH, AND CO.

SAFETY FUZE.—Messrs. WILLIAM BRUNTON AND CO.,

PENHALICK, POOL, near CAMBORNE, CORNWALL, and BRYMBO, near WREXHAM, MANUFACTURERS OF FUZE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.

For the convenience of their customers and others in the North, W. BRUNTON and Co. have recently erected a branch manufactory at Lymington, near Wrexham, where, as at Cornwall, they are at all times PREPARED TO EXECUTE UNLIMITED ORDERS FOR SUPPLYING FUZE upon warrant that it will prove equal to, if not better than any to be procured elsewhere.

CHARLES DAVEY AND CO.,

SAFETY FUZE MANUFACTURERS, ST. HELEN'S JUNCTION, LANCASHIRE.

CREASE'S PATENT EXCAVATING MACHINERY,

FOR SUPERSEDING THE SLOW AND EXPENSIVE USE OF MANUAL LABOUR IN SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.

Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.

Applications to be addressed (for the present) to the patentee, Mr. E. S. CREASE, Tavistock, Devon.

By providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits, with this unmistakable advantage—that when the ground has been once carefully and judiciously selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last Paid.
1200	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—	—	8 18 6	1 0 0—Oct. 1863
4300	Bedford United (copper), Tavistock [L.]	2 6 8	—	—	13 4 0	0 2 0—Jan. 1864
1248	Boswell (tin, copper), St. Just [L.]	6 15 0	—	—	0 15 0	0 5 0—Dec. 1863
230	Botallack (tin, copper), St. Just [L.]	91 5 0	—	—	468 15 0	7 0 0—Aug. 1864
5000	Brondy (lead), Cardigan [L.]	2 7 6	—	—	0 16 0	0 2 0—Jan. 1864
916	Carlisle (silver-lead), Newlyn [L.]	15 7 7	—	—	0 6 0	1 5 0—Nov. 1863
2900	Clifford Amalgamated (cop.), Gwent [L.]	30 0 0	—	—	30 8 6	0 10 0—Dec. 1863
12000	Copper Miners of England [L.]	25 0 0	—	—	7 1/2 per cent.	—Half-yrly.
49000	Ditto (stock)	100 0 0	—	—	1 per cent.	—Half-yrly.
700	Erwin (lead), Cardiganshire [L.]	7 10 0	—	—	10 13 0	0 15 0—Jan. 1864
128	Cwmystreith (lead), Cardiganshire [L.]	60 0 0	—	—	239 10 0	4 0 0—Nov. 1863
1024	Devon Gt. Cons. (cop.), Tavistock [S.E.]	1 0 0	—	—	740 10 0	0 0 0—Jan. 1864
568	Dolcoth (copper, tin), Camborne [L.]	128 17 8	—	—	0 18 0	0 1 6—Jan. 1864
12800	Drake Walls (tin, copper), Calstock [L.]	2 1 0	—	—	93 10 0	0 10 0—Jan. 1864
512	East Basset (cop.), Redruth [S.E.]	29 10 0	—	—	380 0 0	0 5 0—Dec. 1863
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	—	—	1 0 0	0 0 0—Nov. 1863
360	East Darnley (lead), Cardiganshire [L.]	32 0 0	—	—	1 0 0	0 0 0—Nov. 1863
360	East Pool (tin, copper), Pool, Illogan [L.]	2 8 0	—	—	1 0 0	0 0 0—Nov. 1863
1504	East Wheal Loe (tin), Wendron [L.]	2 13 6	—	—	1 0 0	0 0 0—Nov. 1863
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—	—	1 0 0	0 0 0—Nov. 1863
4000	Frank Mills (lead), Christow [L.]	3 18 6	—	—	1 0 0	0 0 0—Nov. 1863
1798	Great Wheal Fortune (tin), Breage [L.]	18 6 0	—	—	5 15 0	0 10 0—Nov. 1863
5908	Great Wh. Vor (tin, cop.), Helston [S.E.]	40 0 0	—	—	2 17 6	0 5 0—Dec. 1863
1024	Herodfoot (id.), near Liskeard [S.E.]	8 10 0	—	—	26 15 0	0 15 0—Oct. 1863
400	Liaburn (lead), Cardiganshire, Wales [L.]	18 15 0	—	—	415 10 0	0 3 0—Dec. 1863
1200	Marke Valley (copper), Camborne [L.]	4 10 0	—	—	2 12 0	0 1 6—Jan. 1864
3000	Miners Mining Co. (L.), Wrexham [L.]	21 0 0	—	—	128 15 0	0 3 0—Nov. 1863
30000	Miners of Ireland (cop., lead, coal) [L.]	7 0 0	—	—	0 2 0	0 2 0—Mar. 1864
40000	Mwendy (iron ore) [L.]	2 18 0	—	—	5 0 0	0 1 0—Dec. 1863
250	Nanty Mines (lead), Montgomery [L.]	20 0 0	—	—	0 5 0	0 5 0—Sept. 1863
6000	New Birch Tor and Vitrifer Cons. (tin)	1 6 8	—	—	0 10 0	0 3 0—Oct. 1863
8938	North Trekerby (copper), St. Agnes [L.]	1 9 0	—	—	36 19 0	0 3 0—Mar. 1864
4000	Par Consols (cop.), St. Blazey [S.E.]	2 6 8	—	—	82 10 0	0 10 0—Oct. 1863
200	Pargy Mines (copper), Anglesey [L.]	50 0 0	—	—	1 0 0	0 1 0—July 1863
1772	Pulberr (tin), St. Agnes [L.]	15 0 0	—	—	1 0 0	0 1 0—July 1863
612	Pulberr (tin), St. Agnes [L.]	8 0 0	—	—	71 0 0	0 1 0—Nov. 1863
1123	Providence (tin), Ury Lelant [S.E.]	10 6 7	—	—	0 10 0	0 1 6—June 1863
6000	Rosewell Hill and Ransom United [L.]	2 16 0	—	—	426 10 0	0 5 0—Jan. 1864
612	South Caradon (cop.), St. Cleer [S.E.]	1 5 0	—	—	74 10 0	0 1 0—May 1863
612	South Tolgus (cop.), Redruth, Cornwall [L.]	8 0 0	—	—	370 13 6	0 1 0—Nov. 1863
400	St. Ives Consols (tin), St. Ives [L.]	8 0 0	—	—	13 18 6	0 1 0—Nov. 1863
940	St. Ives Consols (tin), St. Ives [L.]	8 0 0	—	—	24 13 0	0 11 0—Jan. 1864
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0	—	—	1 10 0	0 1 0—Jan. 1864
6000	West Basset (copper), Illogan [S.E.]	1 10 0	—	—	48 0 0	0 1 0—Jan. 1864
3000	W. Chiverton (tin), Ferranabuloe [S.E.]	—	—	—	397 0 0	0 4 0—Dec. 1863
284	West Damsel (copper), Gwennap [L.]	38 10 0	—	—	597 0 0	0 10 0—Oct. 1863
500	W. Wh. Seton (cop.), Camborne [S.E.]	47 10 0	—	—	3 0 0	0 10 0—Feb. 1864
512	Wheal Basset (copper), Illogan [S.E.]	8 2 6	—	—	3 0 0	0 10 0—Oct. 1863
1200	Wheal Bryn (tin), Perranabuloe [S.E.]	7 0 0	—	—	1 8 0	0 5 0—Sept. 1863
1024	Wheal Grylls (tin), Perranabuloe [S.E.]	2 4 6	—	—	1 8 0	0 5 0—Jan. 1864
4298	Wheal Kitty (tin), St. Agnes [L.]	5 4 6	—	—	9 7 6	0 6 0—Jan. 1864
1024	Wheal Kitty (tin), Ury Lelant [S.E.]	2 6 0	—	—	76 5 0	0 10 0—May 1863
896	Wh. Margaret (tin), Ury Lelant [S.E.]	9 17 6	—	—	57 7 6	0 10 0—Mar. 1863
1024	Wh. Mary Ann (id.), Menheniot [S.E.]	8 0 0	—	—	333 3 0	0 5 0—Nov. 1863
80	Wheal Owles (tin), St. Just, Cornwall [L.]	70 0 0	—	—	162 15 0	0 3 0—Dec. 1863
398	Wheal Seton (tin, copper), Camborne [L.]	68 10 0	—	—	48 15 0	0 12 0—Nov. 1863
1040	Wh. Trevelyan (tin), Liskeard [S.E.]	24 25 0	—	—	15 0 0	0 6 0—Aug. 1863
2044	Wheal Tremayne (tin), Gwennap [L.]	6 11 3	—	—	14 5 0	0 1 0—Aug. 1863
7000	Wicklow (copper) [L.]	2 10 0	—	—	—	—

* Dividends paid every two months.

† Dividends paid every three months.

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

240	Boscan (tin), St. Just [L.]	20 10 0	—	—	36 10 0	1 0 0—Mar. 1863
1900	Carn Brea (copper, tin), Illogan [L.]	15 0 0	—	—	278 10 0	2 0 0—Feb. 1862
3000	Chiverton (lead), Ferranabuloe [S.E.]	5 0 0	—	—	85 0 0	2 0 0—June 1863
2450	Condurow (cop., tin), Camborne [L.]	35 0 0	—	—	1 7 0	0 7 0—May 1862
2450	Cook's Kitchen (copper), Illogan [L.]	17 5 0	—	—	2 7 6	—Sept. 1862
1024	Croft Hill (copper), Redruth [L.]	12 0 0	—	—	147 0 0	5 0 0—July 1862
1088	Croft Hill (copper), Redruth [L.]	12 0 0	—	—	0 10 0	0 2 6—Feb. 1863
280	Darwent Mines (all-lead), Durham [L.]	300 0 0	—	—	0 17 6	0 2 6—Jan. 1863
4076	Devon and Cornwall (cop.), Tavistock [L.]	5 16 3	—	—	41 9 3	0 2 6—Jan. 1860
3000	Dyffryn (lead), Wales [L.]	12 6 6	—	—	7 18 6	0 5 0—Dec. 1861
940	Fowey Consols (copper), Tywardreath [L.]	4 0 0	—	—	0 3 0	0 1 6—Mar. 1862
8000	Great South Tolgus (tin), Redruth [L.]	0 14 6	—	—	0 6 0	0 2 0—Feb. 1860
10240	Gunn's Lake (Chitres) Adit [L.]	0 2 0	—	—	18 18 1	7 6 0—May 1860
3000	Kelly Bray (lead, copper), Callington [L.]	2 10 0	—	—	26 0 0	0 1 0—Sept. 1863
160	Levant (copper, tin), St. Just [L.]	2 10 0	—	—	0 10 0	0 8 0—Mar. 1862
640	Moss Pleasant (lead), Mold [L.]	4 0 0	—	—	0 10 0	0 8 0—Mar. 1862
400	Newtownards Mining Co., Co. Down [L.]	60 0 0	—	—	0 10 0	0 8 0—Mar. 1862
5000	Orehead (lead), Flintshire [L.]	0 8 0	—	—	0 10 0	0 8 0—Mar. 1862
3000	South Emouth (lead), Christow [L.]	1 5 0	—	—	0 10 0	0 8 0—Mar. 1862
200	Spearhead Moor (tin, copper), St. Just [L.]	31 17 9	—	—	0 10 0	0 8 0—Mar. 1862
572	Trellyn Consols (tin), St. Ives [L.]	12 10 0	—	—	0 10 0	0 8 0—Mar. 1862
1000	Trompet Consols (tin), near Helston [L.]	11 10 0	—	—	0 10 0	0 8 0—Mar. 1862
12000	Twelve Apostles Amal. (id.), Wrexham [L.]	1 0 0	—	—	0 10 0	0 8 0—Mar. 1862
2000	Vigna and Clogau (copper), Llanwrst [L.]	3 5 0	—	—	0 10 0	0 8 0—Mar. 1862
1024	Wendron Consols (tin), Wendron [L.]	15 13 10	—	—	0 10 0	0 8 0—Mar. 1862
60	West Burton Gill (lead), Yerkshire [L.]	6 0 0	—	—	0 10 0	0 8 0—Mar. 1862
1024	West Caradon (cop.), Liskeard [S.E.]	8 0 0	—	—	0 10 0	0 8 0—Mar. 1862
4000	West Fowey Consols (tin and copper) [L.]	7 10 0	—	—	0 10 0	0 8 0—Mar. 1862
258	Wheal Buller (cop.), Redruth [S.E.]	10 0 0	—	—	0 10 0	0 8 0—Mar. 1862
128	Wheal Friendship (copper), Devon [L.]	40 0 0	—	—	0 10 0	0 8 0—Mar. 1862
812	Wheal Jane (silver-lead), Kea [L.]	3 10 0	—	—	0 10 0	0 8 0—Mar. 1862
100	Wheal Mary (tin), Lelant [L.]	26 2 6	—	—	0 10 0	0 8 0—Mar. 1862

FOREIGN DIVIDEND MINES.

30000	Australian (cop.), S. Australia [S.E.]	7 7 6	—	—	0 10 0	0 1 0—Dec. 1863
2484	Burra Burra (cop.), S. Australia [S.E.]	8 0 0	—	—	0 10 0	0 1 0—Dec. 1863
4000	Central America (cop.), Cuba [S.E.]	40 0 0	—	—	0 10 0	0 1 0—Dec. 1863
19000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	—	—	0 10 0	0 1 0—Dec. 1863
100000	Don Pedro No. del Rey [L.]	10 0 0	—	—	0 10 0	0 1 0—Dec. 1863
10000	East Indian Coal, Calcutta [L.]	10 0 0	—	—	0 10 0	0 1 0—Dec. 1863
35000	Fortuna (lead), Spain [L.]	2 0 0	—	—	0 10 0	0 1 0—Dec. 1863
35000	Gen. Mining Assoc., Nova Scotia [S.E.]	22 0 0	—	—	0 10 0	0 1 0—Dec. 1863
80000	Kapunda Mining Co., Australia [S.E.]	1 0 0	—	—	0 10 0	0 1 0—Dec. 1863
15000	Llaneros (id.), S. Australia [S.E.]	7 1/2	—	—	0 10 0	0 1 0—Dec. 1863
10000	Montebello (all-lead), France [S.E.]	30 0 0	—	—	0 10 0	0 1 0—Dec. 1863
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0	—	—	0 10 0	0 1 0—Dec. 1863
11000	St. John del Rey [L.]	15 0 0	—	—	0 10 0	0 1 0—Dec. 1863
43174	Unit. Mexican (all), Mexico [S.E.]	28 5 0	—	—	0 10 0	0 1 0—Dec. 1863
10000	Vancouver (coal), [L.]	5 0 0	—	—	0 10 0	0 1 0—Dec. 1863
30000	West Canada Mining Company [L.]	1 0 0	—	—	0 10 0	0 1 0—Dec. 1863
45000	Yudana Mutans (cop.), S. A. [L.]	3 0 0	—	—	0 10 0	0 1 0—Dec. 1863

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Altenand Quenangen (cop.), [L.]	10 0 0	—	—	4 5 0	0 15 0—Nov. 1863
10000	Copago Mining Company, Chili [S.E.]	16 0 0	—	—	4 5 0	0 15 0—Nov. 1863
70000	English and Australian [S.E.]	8 0 0	—	—	1 7 8	0 2 6—Feb. 1863
10000	St. Barthelemy, Min. & Co., N. Z. [L.]	10 0 0	—	—	16 per cent.	—May 1863
10000	Lustanian (of Portugal) [S.E.]	2 0 0	—	—	0 19 0	0 1 0—Feb. 1862
103815	Marquitta and New Granada [S.E.]	1 0 0	—	—	0 9 6	0 1 6—July 1863

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last Paid.
10000	Anglo-Brazilian (gold) [L.]	10 0 0	—	—	0 5 0	—Dec. 1863
35000	Amalio (lead), Spain [L.]	2 0 0	—	—	0 10 0	—
20000	Bear's Tin Streaming Company [L.]	10 0 0	—	—	0 17 6	—Oct. 1863
75000	Bon Accord, North Australia (copper) [L.]	10 0 0	—	—	1 0 0	—Fully paid.
18000	Cape Copper Mining Company [L.]	10 0 0	—	—	7 0 0	—Feb. 1864
35000	Capota (silver), Mexico [L.]	10 0 0	—	—	0 15 0	—Jan. 1862
17000	Centra (lead), [L.]	10 0 0	—	—	1 0 0	—Jan. 1862
60000	Clarendon Consols (copper), Jamaica [L.]	1 0 0	—	—	1 2 6	—Jan. 1862
10000	Copago Smelting [L.]	10 0 0	—	—	1 0 0	—Fully paid.
75000	Dun Mountain (copper), New Zealand [L.]	10 0 0	—	—	1 0 0	—Fully paid.
25000	East del Rey (gold), Brazil [L.]	1 0 0	—	—	1 0 0	—Fully paid.
30000	East Kongberg Native Silver Mining Co. of Norway [L.]	1 12 0	—	—	1 12 0	—Dec. 1863
20000	Elbe Colliery Company, Bohemia [L.]	1 0 0	—	—	1 0 0	—Fully paid.
30000	Ellerslie and Bardonie (copper), Jamaica [L.]	10 0 0	—	—	1 0 0	—Fully paid.
10000	English and Canadian Mining Company [L.]	10 0 0	—	—	1 0 0	—Fully paid.
40000	Fortuna (copper), West Australia [L.]	2 0 0	—	—	1 0 0	—Fully paid.
60000	Great Northern (copper), South Australia [L.]	10 0 0	—	—	1 0 0	—Fully paid.
34000	Hindustan (copper), Bengal [L.]	3 0 0	—	—	1 0 0	—Fully paid.
4000	Hop Silver-Lead and Copper Mining Co. [L.]	25 0 0	—	—	1 0 0	—Fully paid.
10000	Karibits Colliery Company [L.]	1 0 0	—	—	1 0 0	—Fully paid.
15000	Llaneros (sulphur, copper), Portugal [L.]	1 0 0	—	—	1 0 0	—Fully paid.
100000	Monte Aurore (gold), Brazil [L.]	1 0 0	—	—	1 0 0	—Fully paid.
3000	New Burra Burra (copper), Australia [L.]	5 0 0	—	—	1 0 0	—Fully paid.
10000	New Granada (gold), South America [S.E.]	1 0 0	—	—	1 0 0	—Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg [L.]	1 0 0	—	—	1 0 0	—Fully paid.
60000	North Rhine Copper of South Australia [L.]	10 0 0	—	—	1 0 0	—Fully paid.
80000	Nova Scotia (lead and gold) [L.]	1 0 0	—	—	1 0 0	—Fully paid.
15000	Peabody Silver Mining Company, Mexico [L.]	1 0 0	—	—	1 0 0	—Fully paid.